

TRANSFER & STORAGE

TRANSFER AND STORAGE
OF MERCHANDISE

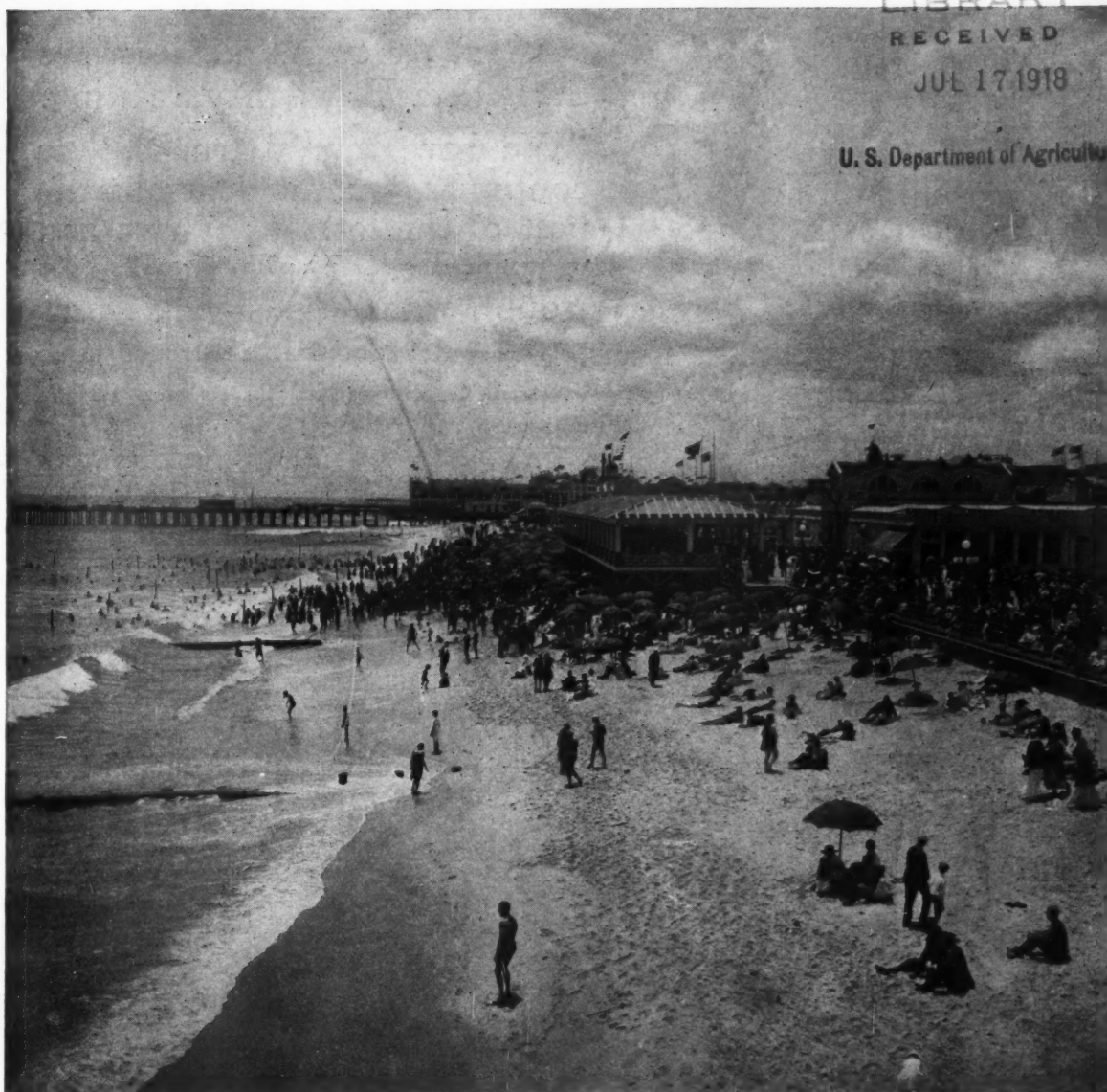
MERCHANDISE
DISTRIBUTION

MOVING AND STORAGE OF
HOUSEHOLD GOODS

Vol. XVII, No. 7

New York, N. Y.

July, 1918



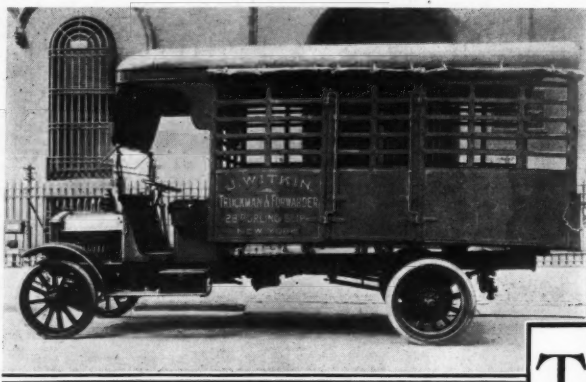
*View of Asbury Park, N. J., the place of the annual convention of the
New York Furniture Warehousemen's Association, July 19, 20, 21 and 22*

Editorial Contents. Page 3

Advertisers' Index—Next to Last Page

Published Monthly. \$2.00 a Year.

Entered as second-class matter January 29, 1916, at the
Post Office at New York under the act of March 3, 1879.



"Best Running Stock We Ever Had"—

Another **FEDERAL**

Federal Truck which is the best "Running Stock Ever Owned" by J. Witkin, Inc., prominent transfer company of New York City.

*Return Loads Will
Cut Your Costs.*

THAT is the way Mr. J. S. Wald, Manager of J. Witkin, Inc., New York, describes the Federal Truck they are using.

"We have several trucks," he continues, "but the Federal is the best of the lot. We have had very little, or practically no trouble with the Federal. Compared with the other makes that we have the Federal is the most economical of the lot."

Federal ruggedness, durability and unusual economy enable it to compare favorably in any work.

Write for your copy of "Traffic News," a monthly publication for truck buyers and owners.

Federal Motor Truck Company
57 Federal Street, Detroit, Mich.

FEDERAL

One to Five Ton Capacities



Household Goods Shipped *and* Lower Freight Charges Secured

THE shipping problem is difficult today. You Furniture Warehousemen know that, and what you are looking for is its most efficient solution. What's the answer? Listen.

Eighteen years ago this company was formed to afford you men the very service you demanded. Today, thanks to two things—our constant earnest effort toward supplying a freight-forwarding service which would meet the highest ideals of warehousemen, and your hearty appreciation, as shown by your constantly increasing patronage—we are enabled to offer you, now when it is most needed

a service which assures Saving, Speed and Safety

There are several methods of moving household goods, some of those afforded you resembling in slowness, inconvenience and expense those illustrated by three of the views on this page.

Look at these pictures, and then glance at the correctly loaded car in the lower corner—this car of household goods loaded by the experts of the

TRANS-CONTINENTAL FREIGHT CO.

Remember, the shipping of household goods is a specialty with us. Bear in mind that *T-C. F. Co. Service is an Asset-Building Service* for you in Good Will and Satisfaction of your customers. Think of its money saving value, and be sure and let us figure on your next haul.

We load household goods at Chicago, New York, Boston, Buffalo and Cincinnati in through cars for the principal cities of the West, Southwest and Florida, don't forget; and also remember, this service effects great savings in freight rates.

P. S. Send for the Warehouseman's Handbook on Shipping Goods and Saving Money. It's free, gentlemen. Write for your copy.

TRANS-CONTINENTAL FREIGHT COMPANY
WOOLWORTH BUILDING, NEW YORK

GENERAL OFFICE, 203 DEARBORN ST., CHICAGO

Old South Bldg., Boston
Ellicott Square, Buffalo

Union Trust Bldg., Cincinnati

Alaska Bldg., Seattle
Pacific Bldg., San Francisco

Van Nuys Bldg., Los Angeles

Write the Nearest Office



A Vital War Measure

**Make Use of Our Highways, Conserve Steel
and Relieve Transportation Facilities
in a Big and Practical Way**

TO BUILD 50,000 steel freight cars and 1250 locomotives, takes approximately 1,437,000 tons of steel.

It takes only 300,000 tons of steel to build 200,000 motor trucks with equal ton mile freight-carrying capacity. This is a saving of over 1,100,000 tons of steel.

By using the highways, in addition to relieving railways of a portion of their freight, tremendous terminal expenses and congestion are saved, as well as the cost of transferring to and from terminals. Motor trucks over highways carry merchandise direct from shipper to consignee.

Greater use of our highways is imperative.

THE AUTOCAR COMPANY

Ardmore, Pa.

ESTABLISHED 1897

TRANSFER & STORAGE

Established in 1902 as The Team Owners' Review

Published Monthly by the

Transfer and Storage Publishing Corporation

U. P. C. Building

239 West 39th Street, New York City

Officers

Willis D. Leet, *President*

F. V. Clark, *Vice Pres. and Gen. Mgr.*

A. B. Swetland, *Secretary*

E. M. Corey, *Treasurer*

F. C. Hahnel, *Editor*

Advertising Representatives

Norman B. Lavers, *Mallors Building, Chicago*
Louis Marcus, *New York*

Subscription Rates

United States and Canada.....\$2.00 per year
Foreign Countries\$3.00 per year
Single Copies\$.20 each

Advertisements

Changes in copy for advertisements in the next issue to be in the office of publication not later than 10 days before date of publication.

Owned by United Publishers Corporation, 243 West 39th St., New York. H. M. Swetland, *President*; Charles G. Phillips, *Vice-President*; W. H. Taylor, *Treasurer*; A. C. Pearson, *Secretary*.

CONTENTS OF THIS ISSUE

LEADING ARTICLES

Who Pays the Bill?..... 5
Central Club Convenes in St. Paul..... 9
More Return Loads Bureaus Needed..... 12
Big Profits in Cleaning Carpets..... 15
Description of a Nearly Perfect Merchandise Warehouse 28
Report of Illinois Furniture Warehousemen's Annual Meeting, Held at Elkhart Lake, Ind., June 21 to 25... 33

NEWS

Barge Canal Rates Are Lower Than Railroads..... 20
More Bonded Goods Now in Warehouses..... 20
New York Warehousemen to Hold Meeting..... 21
Hudson Vehicular Tunnel Project Discussed..... 21
New York Team Owners' Annual Meeting..... 22
Committee Appointed to Control Exports..... 22
Storage Rates on Food to Be Regulated..... 23
Embargoes on Shipments of Wool Lifted..... 23

MISCELLANEOUS

Alaska Transferman Has Many Activities..... 10
More Warehouses After War..... 11
Concerning Warehouse Co-operation..... 18
Warehouse Finds Profits in Handling Unclaimed Shipments 24
Government Co-operation Big Topic at the National Team Owners' Convention 25
The Expert Who Wasn't Sure..... 26
Storing Records Eight Minutes from Wall Street..... 31

DEPARTMENTS

The Editor's Viewpoint..... 14
Letters from Readers..... 32
News of the Transfer and Storage Industry..... 38
The Shippers' Index..... 39
The Exchange 69

Advertisers' Index—Next to Last Page

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

CHICAGO.....446 Marquette Bldg. SAN FRANCISCO, 855 Monadnock Bldg.
BOSTON.....640 Old South Bldg. LOS ANGELES518 Central Bldg.
NEW YORK.....324 Whitehall Bldg. PHILADELPHIA ...272 Drexel Bldg.
PITTSBURGH.....435 Oliver Bldg. DETROIT.....527 Ford Bldg.
ST. LOUIS, 1537 Boatmen's Bk. Bldg. SEATTLE.....402 Arctic Bldg.



Specializing is not confined to any one line of endeavor.

"Judson" specializes in freight forwarding, and "Judson System" is the net result of our steadfast endeavor along that one line.

Does it not stand to reason that a company devoting its entire time to one particular line of business must have reduced it to a science?

Don't you think it would be showing good business judgment to let "Judson" serve you in your shipping?

Time, Money and Energy have been expended bringing "Judson System" up to its present undisputed state of perfection, and it is possible for you to reap the benefit by consigning your shipments in our care.

"Judson" forwards less than carload lots of household goods and automobiles to the "Golden West" and Florida in through cars at lower rates, and export shipments in any quantity to all parts of the world.

To those who have availed themselves of our service this will serve as a kindly reminder on future shipments. Those who have not made use of it are respectfully urged to give it a trial.

We have correspondents in all principal cities of the world.

You can get quick action by writing nearest office shown at top.

Judson Freight Forwarding Co.



HIGGINS

QUALITY SPRINGS

FOR TRUCKS

"Win the War First!" Everything else is of secondary importance now—the life of the Nation is at stake. If it is lost—everything is lost.

Save! Conserve! *And Serve!* Do your bit—and some. That's our spirit—*War First—Win First.* And that same quality you'll find in Higgins Quality Springs for Trucks. A clean fight to the finish. Quality that doesn't know the meaning of defeat—that absolutely refuses to surrender to the most brutal attack of heavy loads and bumpy roads.

The sort of Spring service you need to protect your trucks—to conserve costs and to render most efficient service in a military, purely patriotic or industrial way.

With us—it is Government demands above everything else; consequently, we make no unpatriotic or untruthful delivery promises. We are serving the Nation to the full extent of our ability. We will serve you as quickly as conditions will permit. And—this you may be sure of—the Springs you *do* get will rank up to your demands. No center bolt—no center breakage or breakage in any section.

State your needs. We will convince you Higgins Construction and Higgins Quality will fulfill them in the most "patriotic" and economical way.

HIGGINS SPRING & AXLE CO. - Dept. 730 - Racine, Wis.

NO HOLE - NO BOLT - NO HUMP - NO JOLT

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS



TRANSFER & STORAGE

PUBLISHED MONTHLY

Entered as Second Class Matter, January 29, 1916, at the Post Office at New York, New York, under the Act of March 3, 1879



Volume XVII

NEW YORK, JULY, 1918

No. 7

WHO PAYS THE BILL?

American Storage Warehouses, Dr.,

To Fire, Cr.,

for the years 1908 to 1918

\$57,538,527

By EDWARD F. CROKER

HUNDREDS of millions of dollars' worth of merchandise, foodstuffs, war materials and household goods are stored on piers, in warehouses and elevators throughout the United States. They are the nation's assets, and the structures which house them are the reservoirs of the nation's wealth. The question may properly be asked, "What precautions are being taken to safeguard these stores from destruction by fire?"

Fire at all times is man's most tricky and deadly enemy. In war times it is even more greatly to be feared. When it is understood that the vast majority of fires occur from easily preventable causes, the importance of calling to our aid every prevention device that modern science has produced is at once recognized, particularly in these treasure houses that hold our reserve supplies.

Many of these storage buildings are of fireproof, or, at least, fire-resisting construction, but their contents are not. The trained fireman has learned from bitter experience that no building is any more fireproof than its contents. The business man,

also, has learned from experience that the interruption to business, inability to fill orders and loss of customers entailed by a fire are never paid for by insurance.

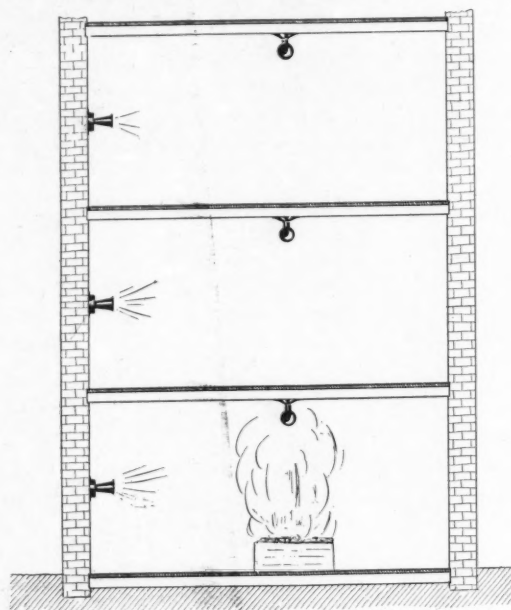


Edward F. Croker was in the fire department service of New York City twenty-seven years and for the last twelve years of that time was Chief of Department. He had long recognized the fact that while modern fire-extinguishing methods have been highly perfected, too little attention had been paid to the vital matter of preventing fires. On May 1, 1911, he retired to found an organization that would eliminate the causes of fires and he is recognized as the foremost fire prevention expert in the world.

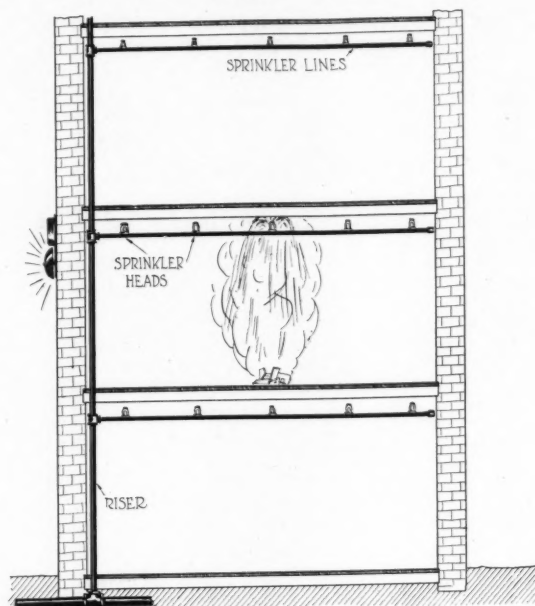
Never before in the history of the country have such huge stocks of goods of every description been stored in warehouses. The demand for storage space is unprecedented, and has resulted in the use of all types of structures for storage purposes. The majority of these buildings were not intended for the use to which they are being put, but in the general rush all are made to serve. In these cases, we find the double hazard of combustible contents and non-fireproof construction.

In practically all instances there is still a third hazard—inexperienced labor. The trained employees, if of military age, have been called to the colors, or have responded to the lure of higher wages in the war material manufacturing industries. It has been necessary to replace them with whatever substitutes offered themselves. Crowded working spaces, a vastly increased amount of work to be

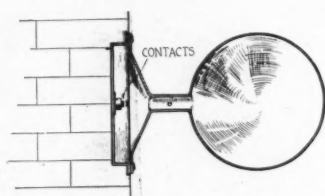
Various Systems of Fire Prevention Equipment



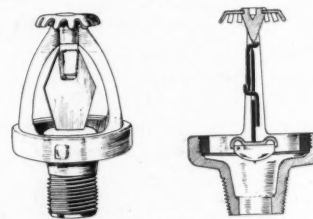
AIR ALARM IN ACTION



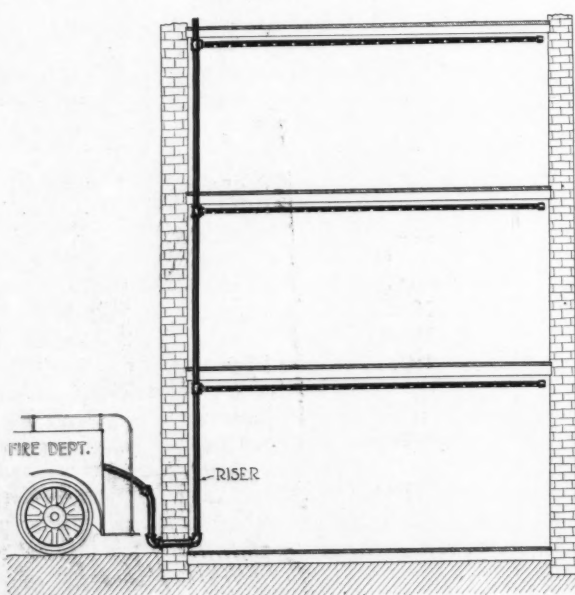
AUTOMATIC SPRINKLER SYSTEM



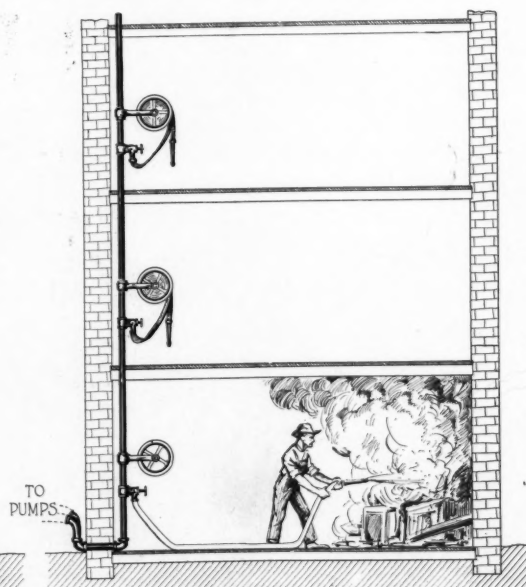
FIRE DETECTOR



SPRINKLER HEAD



DRY PIPE INSTALLATION



STAND PIPE AND HOSE

done and careless workers make a combination that multiplies many times the ordinary fire hazards of all lines of business.

Taking our storage facilities in the order of their importance at this time, the shipping piers offer a fruitful field for study. The principles involved in protecting a pier are similar to those involved in protecting any large unheated structure, and, in general, may be made to apply to the average storage warehouse.

Road Has Fire Brigade

The D., L. & W. piers on the North River at Hoboken, N. J., are examples of the best in fire prevention equipment. The road has organized its own fire brigade and has its private alarm system connected with the city's fire alarm system. An alarm of fire on any pier is automatically transmitted to the fire alarm telegraph bureau. While the city apparatus is responding, the railroad fire brigade gets into action, and, in the majority of cases, has the blaze under control before the arrival of the department.

Unless there is an explosion, all fires are the same size at the start. For that reason the first few minutes in the life of a blaze are invaluable to the men whose duty it is to fight the blaze, and any device that detects a fire in its infancy, so to speak, should be given careful consideration by all who are interested in prevention work. There are a number of such devices on the market, but the one in use on many of the D., L. & W. piers is admirably adapted to structures of that type.

This is called the air alarm. The apparatus consists of detectors spaced upon the ceilings and a fire alarm cabinet on the side wall of each floor. The fire alarm cabinet controls one or more powerful electric alarm horns, or loud-ringing fire alarm gongs, if preferred, and within the cabinet is a set of dry cell batteries; a code

PRESIDENT WOODROW WILSON to the Council of National Defense:

"Preventable fire is more than a private misfortune. It is a public dereliction. At a time like this, of emergency and of manifest necessity for the conservation of national resources, it is more than ever a matter of deep and pressing consequence that every means should be taken to prevent this evil."

wheel transmitter for making all the electric horns or gongs continuously indicate the number of the floor or section of the pier, in the case of the D., L. & W., from which the alarm emanates, and push button devices for testing, operating the system manually and for employees' fire drills.

The detector consists of a hollow brass ball set in a wall board. The ball connects with a brass tube which, in turn, connects with a small chamber containing a sheet of copper one-thousandth of an inch in thickness. This sheet is similar to the diaphragm of a telephone transmitter or receiver. A sudden rise in temperature of four to six degrees in one minute heats the air in the brass ball correspondingly, and the rapid expansion causes the diaphragm to buckle, its rear surface making contact with an electric wire and completing a circuit. This operates all the horns or gongs simultaneously, indicating the number of the floor or section of the pier involved. The system may be made to release automatically the nearest city alarm box, thus transmitting the call to the fire alarm telegraph bureau. Each of these brass balls serves for a space of 800 square feet.

This automatic alarm is a valuable assistant to the

Fire Losses of 1916

THE following figures compiled by the Actuarial Department of the National Board of Fire Underwriters show the total fire losses on warehouses of various types for the year 1916:

Cold Storage	\$171,203
Cotton (no compressing) .	1,666,308
General Storage	2,631,006
Hemp, Jute and other vegetable fibres	21,134
Household Furniture	313,139
Tobacco	258,440
Whiskey	59,827
Wool	110,475
Grain Elevators and Warehouses (Terminal) ...	3,614,198
Grain Elevators and Warehouses (Country)	1,915,876
Total Loss	\$10,761,611
Total Loss Paid	7,917,906

Fire Losses of Ten Years

THE following total figures on fire losses in unsprinklered warehouses for the years 1908 to 1917, inclusive, have been prepared by the General Fire Extinguisher Co.:

Year	Loss	No. of Fires
1908	\$5,880,020	150
1909	6,314,000	90
1910	6,670,000	116
1911	9,268,554	185
1912	5,536,384	158
1913	5,749,950	167
1914	4,948,819	158
1915	3,914,300	145
1916	6,186,500	159
1917	3,070,000	73

Total \$57,538,527 1,401

Average loss per fire, \$41,069

For the same period the loss on sprinklered warehouses was \$34,227, the number of fires was 31 and the average loss per fire was \$1,104.

night watchman or the day employees. It finds the fire, sounds the warning and indicates the location. To give an idea of the cost of this system, a five-story building, 50 by 100 feet, will serve as an example. An adequate air alarm installation for such a structure would cost from \$400 to \$600.

There is another device which takes one more step. In addition to detecting the blaze and sounding the alarm, it immediately begins to deluge the affected section with water, which continues to flow until turned off. This is the automatic sprinkler of the wet pipe type.

Heat Releases Water

The automatic sprinkler system consists of a series of pipes crossing the ceiling of a given room, each pipe carrying a number of heads, or upright water outlets. The water is retained by a diaphragm held in place by a strut, or fusible metal link. A rise in temperature to 155 degrees or over melts this strut, releases the diaphragm and starts the water spouting in a downpour over the section below where the fire is located. As many sprinkler heads are opened as the size of the fire warrants, but this action is automatic. The opening of a head sounds an alarm gong outside the building and may be connected with the city alarm system. The automatic sprinkler system for a building of the size previously mentioned would cost between \$4,000 and \$5,000.

The wet pipe system is invaluable in all types of buildings that are heated in winter. Such structures as piers, however, do not lend themselves to its use for the reason that lack of heat results in the freezing of the pipes. For unheated buildings the dry pipe system or the stand-pipe is suggested.

Floods Any Floor

The dry pipe system consists of a series of perforated pipes crossing the ceiling of each floor. Any floor or floor section may be flooded with water pumped into the outside Siamese connection by a fire engine. The perforated pipe installation for a building of the size mentioned costs about \$300.

The stand-pipe is equally well known. It extends vertically from cellar to top story. On each floor is an outlet valve connected with 50 feet or more of hose with a nozzle. This system is usually connected with a large gravity tank on the roof which furnishes a supply of water to be used by employees in fighting the fire before the arrival of the apparatus. When the firemen come, an engine is coupled to the outside Siamese connection if the additional water pressure is found necessary. The stand-pipe installation costs from \$400 to \$600.

Pier Connections Similar

In the case of a pier the connections for these two dry pipe systems are the same as those found in a building. The outside connections are used by the fire boats on the pier ends and by fire engines on the bulkheads.

A very efficient fire fighting device for piers and warehouses is the 40-gallon chemical engine. This is a chemical tank on wheels equipped with 50 feet of chemical hose, and can be operated by one man. An engine of this size has an extinguishing capacity equal to that of 6,000 gallons of water. There is also the portable 3-gallon extinguisher, and the ordinary fire hook and fire axe which should be a part of the equipment of every such

structure. The 40-gallon engine costs \$185, and the 3-gallon extinguisher from \$11.25 to \$13.50.

Fire Chief Will Help

The devices and systems described here are not expensive—in fact, their cost is of no consequence when one considers the protection they afford. Once they are installed, the pier or warehouse owner will find the fire chief of his city only too glad to furnish him with a trained department officer to instruct employees in the use and care of these preventatives.

The United States Government recognizes the value of this system. In the big cantonments and camps, city department officers have been detailed to look after the prevention and extinguishing of fires. Firemen who have been called in the draft are being used as instructors. This work of instruction in mercantile establishments is one of the many activities of the Croker National Fire Prevention Engineering Co. In addition, we furnish men to inspect premises at stated intervals and make reports on conditions, together with suggestions as to the elimination of any hazards found.

Inspect Wiring Often

Electric wiring should be inspected frequently, for approximately 80 per cent of all fires are attributable to defective wiring. In the case of storage houses we suggest better methods of storing goods in order that there may be a sufficient number of aisles to give firemen plenty of operating space if the need arises.

I am happy to say that the household goods storage houses of Greater New York are in excellent condition so far as fire protection is concerned. Our men make regular inspections of these houses, and their recommendations are followed to the letter. The result of this is absolute safety for the valuables thus stored. The truth of the matter is that there are more unprotected household effects piled up in the basements of New York's apartment houses than there are in all the city's storage houses combined.

Summarizing the situation, it may be said that we are living and working under entirely changed conditions today. Risks and hazards that existed in peace times are greatly increased now that our country is at war, and common sense tells us that our safeguards should be increased in exact proportion.

It makes no difference whether a fire is caused by the activities of enemy agents or originates in some preventable manner, the loss to the owners, to the industry and to the country itself is the same. Fire loss today is a national loss. Every building and every branch of industry is a national asset, and we as individuals have no right to endanger our country's property. It must all be devoted to the vitally important business of winning the war. There are enough ruins in Europe. Let us have none here if we can prevent it.

EDITOR'S NOTE.—In the next article of the fire prevention series, the various types of fires that attack storage warehouses will be discussed and methods suggested for their control pending the arrival of the city department.

Central Club Convenes in St. Paul

Warehousemen of Middle West Adopt Labor Charge Increases at Semi-annual Meeting

By J. E. Smith

LABOR charge increases effective July 15, to be followed by closer study of costs and maximum base rates, are the results of the semi-annual convention of the Central Warehousemen's Club held at the Hotel Saint Paul, St. Paul, Minn., on June 4 and 5.

A new basis for labor charges was made by the organization, conforming, with a percentage increase, to the figures of the Minnesota club. W. W. Morse, president of the Minnesota club, indicated that action will be taken soon by the members to make the necessary filings with the State Railroad and Warehouse Commission in order to make the organization's rates uniform, probably by August 1.

In this connection the Central Club appointed a rate committee to meet at its own discretion. This committee aims to facilitate the work of the organization as effectively as the previous rate committee in formulating the new copyright base rate and modification tables. Its members are John Bekins, Omaha Van & Storage Co., Omaha, Neb.; W. H. Kohler, Gordon Fireproof Warehouse & Storage Co., Omaha, Neb.; W. W. Morse, Security Warehouse Co., Minneapolis, Minn.; P. J. Mills, White Line Storage & Transfer Co., Des Moines, Ia., and George Hamley, Colonial Warehouse Co., Minneapolis, Minn.

Fifty Attend Sessions

Fifty members of the Central Warehousemen's Club were in attendance in the roof garden of the Hotel Saint Paul when the convention was called to order. Vice President S. M. Woodson, of Kansas City, presided in the absence of President Charles H. Grattan, who was seriously ill at his home in Omaha. The members sent a telegram of sympathy and cheer to Mr. Grattan, and on the following day received a message of greeting from him.

After reading his report, Secretary F. N. Bates, of Minneapolis, announced his resignation to enter the Quartermaster's Department of the Army with the rank of captain. The name of George Hamley, of Minneapolis, was proposed as his successor, and Mr. Hamley was immediately put in office, taking the desk left vacant by Mr. Bates.

The labor charge discussion was started by W. H. Kohler, of Omaha, and a number of speakers followed. It was brought out that overhead this year is larger than ever before, and that expenses are being taken out of storage when they should come from labor. One speaker declared that he requires 100 per cent more men to handle 30 per cent more storage. The proposed advance

in freight rates, it was asserted, is undoubtedly due to labor increases.

Along this line, a general appeal was made for uniformity in labor charges and rates. Uniformity, it was declared, is one purpose of organization, and it was urged that the storage warehouse business should be on as reliable a basis as banking. For this reason, J. Bekins, of the Omaha Van & Storage Co., Omaha, Neb., asked that the Central Club's guide be made uniform with that of the Minnesota Club.

To Increase Rates

In order for the warehouseman to break even, S. M. Woodson, of the Moore Transfer & Storage Co., Kansas City, declared that the minimum rate for labor should be 60 cents. It was pointed out that in many instances wages have advanced 15 per cent, and to offset this some members favored an advance in the labor charge of from 30 to 35 cents. President Morse of the Minnesota Club said he would like to see the Central make an advance in the hope that his own organization would meet it by August 1.

The outcome of the discussion was the following changes in the labor charge table:

Lbs. per cu. ft.	Old Rate per Ton	New Rate per Ton
0 lbs. to 5 lbs.	\$1.50	\$1.90
5 lbs. to 10 lbs.	1.00	1.25
10 lbs. to 18 lbs. ....	.80	1.00
18 lbs. to 25 lbs. ....	.75	.95
25 lbs. to 35 lbs. ....	.65	.85
35 lbs. to 45 lbs. ....	.55	.70
45 lbs. to 55 lbs. ....	.45	.60
55 lbs. up. ....	.40	.50

T. J. Skellet, of the Skellet Co., Minneapolis, urged the delegates to make the new tariff effective at once where filing with the state authorities is not necessary, as in Minnesota and Illinois. Mr. Bekins moved that the extra labor charges should be as follows:

New Labor Rates

Common labor, 50 cents per hour, instead of 40 cents; skilled labor, 90 cents per hour, instead of 75 cents; clerical labor, 75 cents, instead of 60 cents; minimum charge, 40 cents, instead of 25 cents. This conforms to the new tariff basis.

Rule 7, which reads, "Unless otherwise provided in this tariff, the charge for weighing goods at the time of

arrival or delivery will be one-half cent per cwt., or for weighing and repiling one and one-half cents per cwt.," came up for discussion at the second day's session. It was amended to read, "Unless otherwise provided in this tariff, the charge for weighing goods at the time of arrival will be one-half cent per cwt. in carload lots, and one cent less carload lots with a minimum of 10 cents, on the basis of actual labor."

It was suggested that for the handling of automobiles a charge of 50 cents an hour for actual time consumed and an additional charge for materials used be levied. It was also suggested that a labor rate of at least \$1 per machine be attached to the automobile rates. Reports on these points will be made by a committee consisting of J. Bekins, C. W. Little, W. W. Morse and E. M. Hill.

Changes Piano Rates

A motion that the household goods charge handling into warehouse be half the first month's storage charge and half a month storage charge for handling out was adopted. It was decided that in future the rate on upright pianos stored be \$1.50, and on grand pianos \$2.50.

The club adopted the Minnesota schedule for the storage of automobiles with slight changes. This move makes the reloading charge at warehouse platform, wheels on, not decked, \$1.50 instead of \$1 per machine, and for gas tractors 6¼ cents per square foot per month, instead of 1 cent per lineal foot or part thereof per day.

One of the interesting features reported on for the past year was the apprehension and conviction of a bill

of lading crook who had been swindling warehousemen. He was captured at Bay City, Mich., pleaded guilty and was sentenced to not more than 15 years in the state penitentiary.

At one of the sessions, J. ter Veen, of the Merchants' Warehouse Co., Peoria, Ill., chairman of the committee, appointed at the previous meeting in Kansas City to plan for the handling of farm implements, offered the results of his work to date. This was a table showing the amount of storage space necessary for various implements piled for reshipment in domestic trade, as follows:

Gang plow, 28 in. wide by 40 in. long, 60 cu. ft.
Sulky plow, about 45 cu. ft.
Single row of cultivators, about 35 cu. ft.
Double row of cultivators, about 65 cu. ft.
Walking plow, 28 cu. ft.
Hay loader, 57 cu. ft.
Hay power press, about 250 sq. ft.
Complete wagon, 40 cu. ft.
Complete buggy, 23 cu. ft.
Disc harrow, about 25 cu. ft.

A number of social activities were on the program. The delegates were luncheon guests of the entertainment committee, toured the surrounding country in automobiles and were served with dinner in the roof garden on top of the Ballard Storage House as guests of N. R. Frost. After inspecting the Ballard plant, they were driven to Minneapolis, where they were shown over the Boyd warehouse.

Alaska Transfer Man Has Many Activities

UNDERTAKER and embalmer, general forwarding agent, transfer man, dealer in wood and coal, holder of government mail and bonded baggage contracts, and proprietor of a jitney service are some of the titles that might be given to Frank Suffecool, of the Alaska Transfer Co., of Skagway, Alaska. His business embraces all these activities, and his description of his work throws an interesting light on the sidelines of a transfer company in the most northerly territory of the United States.

"I have all the mail contracts, and am the only transfer at Skagway equipped for this work," Mr. Suffecool says in a recent letter to *TRANSFER & STORAGE*.

Fuel Trade Important

"I have a splendid wood and coal trade which is a very important item here in the winter, when fires are kept up night and day. There is no gas, and electricity is high, so wood and coal are used the year round for fuel.

"The railroad sells shop coal to its employees only, but many of them do not use it, as it is steam coal and not very satisfactory for home use. My principal competitor, who is also my partner in the undertaking branch of my business, is a German and comes under the ruling on

enemy aliens. Therefore it begins to look as though the Government would rule him off the dock. What will be his loss will be my gain, or in other words, 'Tis an ill wind that blows nobody good.'

"My undertaking branch is a gold mine. It so happens that neither my partner nor myself understands a thing about this work, but one of my drivers is an expert embalmer, having learned the trade with his grandfather at Vancouver, B. C. My partner and I finance the business and the other fellow does the work.

Baggage Big Item

"Baggage is a tremendous item, and I have the exclusive contract for handling all bonded baggage, which often amounts to \$50 a single load during the busy season. I have three horse-drawn trucks and five express wagons, besides my motor truck and car that I use for jitney service. There are all sorts of sleds and equipment for the business. My barns and warehouses for coal, etc., cover two lots, each 100 by 100 feet.

"Skagway, being the gateway to the interior of Alaska and containing the shops of the White Pass & Yukon Railroad, is a very important place, as the transfer from boat to train speeds up business."

More Warehouses After War

National Distributor Urges Increased Facilities

EDITOR'S NOTE.—*The following incidents and opinions, based on the experience of two large Eastern distributors who have used warehouses for many years, are typical cases of criticism of warehouse methods. At their own request, the names of the relators are withheld.*

ENORMOUSLY increased warehouse facilities will be required after the war if the industry is to handle adequately the huge volume of business that is now pouring in its direction in an ever-growing stream.

This is the opinion of the executive officers of one of the leading sugar manufacturing and distributing concerns in the country. Prior to the government restrictions on sugar the firm in question did practically all its distributing through warehouses. Its officers declare that in the days to come when these restrictions have been lifted from their product they cannot go back to warehousing on the old basis.

All industry, they say, has felt the changes brought about by the war, the principal one being that war time business cannot be transacted on peace-time policies. This, it is said, is particularly true of factory distribution through warehouses. Railroad congestion, car shortage and the difficulty of moving freight, owing to the necessity of giving over the roads to the task of transporting soldiers and munitions, have made the problem of merchandise distribution even more difficult of solution. The answer seems to be in the maintaining of spot stocks, and it is here the warehouses must come to the rescue.

Facilities Were Lacking

"Until the government put restrictions on sugar," said the traffic manager of this firm, "we dealt very largely with warehouses, using them in eighteen of the principal cities of the country. There were three or four, notable among them the Broadway Warehouse, of Cleveland, Ohio, on which we could depend to keep absolutely accurate reports and accounts of shipments. The others tried to do the right thing, but seemed to have no facilities for this special work. This actually resulted in financial loss to us in many cases.

"As an instance of this fault, we sent at one time a shipment of 65 barrels of sugar to a certain warehouse for distribution to our customers. When they arrived at their destination, 51 of them had been broken in transit and a part of the contents lost. The broken barrels were short weight.

"When they were claimed by customers and weighed, the short weight was discovered and claim for the loss made on the railroad. The railroad, in turn, rightly insisted that as no report of short weight was made by the warehouse, the buyers must be right. Consequently, we stood the loss.

"In cases of this kind the railroads almost invariably favor the buyer, since the majority of warehouses are not noted for keeping accurate records of damaged shipments. Unless the warehouseman makes it his duty to observe all possible care in unloading cars, recording damage and immediately notifying the receivers, the railroads will continue to favor the buyers in their award of claims. If the warehouseman keeps imperfect records, and a buyer makes claim for damage, the railroad must take the word of the buyer and the shipper must pay the loss.

"During our experience with merchandising warehouses, we found the South an unsatisfactory section of the country with which to deal. Warehousemen there seemed careless in everything but the handling of cotton. In the North, Milwaukee was almost bare of warehouse facilities. If we return to warehousing after the war, there must be greatly increased warehouse facilities and greatly improved business methods. In our line, all indications now are that direct shipments will continue to be our method."

Distributors Want Service

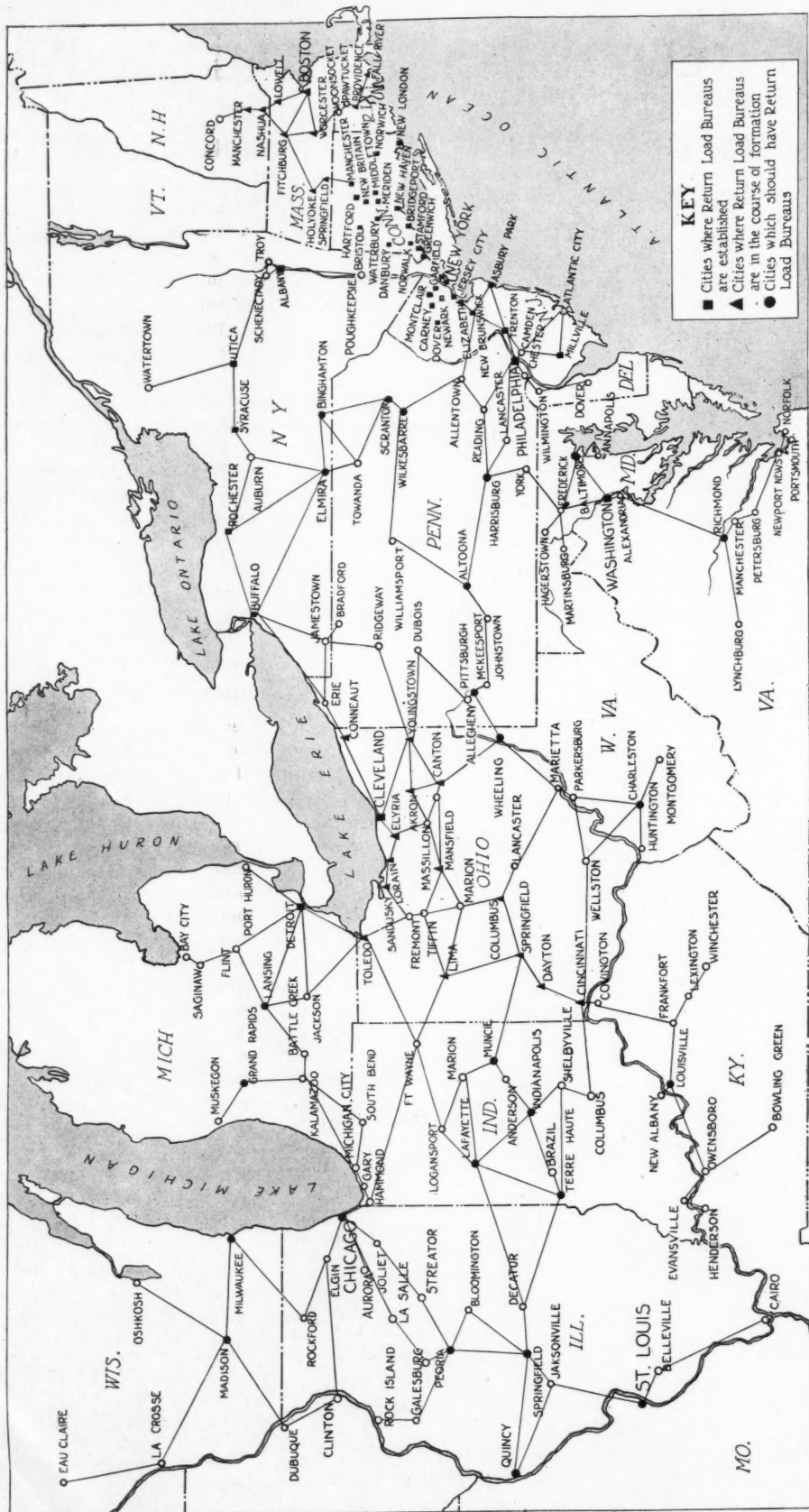
Although many warehousemen are of the opinion that their methods are in no more need of improvement than are the methods of the manufacturers themselves, it would seem that the manufacturers have the right to expect the thing for which they are paying—service. The traffic manager of a large mail order house in New York cited the following incident as an example:

The firm in question has no special business forms for use by the warehouseman with whom it deals, and it found that in many cases he did not even use his own business forms for the purpose.

A consignment of catalogues was sent a certain warehouse for distribution at the same time several hundred other similar consignments were sent out to various cities. A few days later the receipts for the catalogues began to pour in from the warehouses. Among them was a bit of white paper on which had been written in pencil "Merchants' Warehouse," and beneath it the receipt for a consignment. The consignment was not numbered on the makeshift receipt; there was no date and no city or state named. It was not even written on a warehouse letterhead, which would have identified it sufficiently for record purposes.

Inasmuch as the firm in question dealt with a number of "Merchants' Warehouses" in a number of cities, the particular warehouse in question could not be identified until every such consignment had been checked back to the firm's books and a shipment corresponding in the number of separate packages to the one that was causing the trouble found. Thus, by the process of eliminating all other "Merchants' Warehouses" with which it had dealt that month, the distributing firm was finally able to check off the mysterious receipt.

Where Return Loads Bureaus Should Be Formed and Cities They Can Serve



two that are in actual operation. The solid circles on the map show the transfer and storage centers where there is a need of bureaus and where they should be formed. Transfer and storage men in the cities designated by a hollow circle should be listed at the bureaus to which their city is connected

THE return loads bureau is well established along the Atlantic Coast with the exception of the States of Massachusetts and New Hampshire, and these have bureaus in the course of formation. There are several bureaus being established between Buffalo, N. Y., and the Mississippi River, but only

More Return Loads Bureaus Needed

Transfer and Storage Men Can Increase Revenue by Forming a Bureau in Every Center in the Industry

EVERY large transfer and storage warehouse center east of the Mississippi River should have a return loads bureau so that the transfer and storage men owning motor trucks can double their truck profits by being able to secure loads for their vehicles in both directions. These bureaus will not only enable the transfer and storage men to increase their profits, and the manufacturers to ship goods more rapidly, but they will assist the railroads to relieve the freight congestion.

Return loads bureaus have been established in thirty-five cities in seven states, and practically every one of these has been a success. Before these bureaus were formed, few of the nearby transfer and storage men received the full efficiency of their trucks. Many of them would carry a load to some city 50 or 100 miles away and return with an empty truck. This would not only reduce their profits 50 per cent, but in many instances they would lose money on the trip. The reason for this was not that the transfer and storage men did not try to get a load, but they had no conception of how to secure such a load.

The pioneer in this work was the state of Connecticut. The United States Chamber of Commerce, recognizing the good work accomplished by that state, issued bulletins to all Boards of Commerce affiliated with it in the country, calling attention to the return loads bureaus and the plan of motor truck transportation.

Thirty-five Bureaus Established

Practically all of these thirty-five bureaus are located along the Atlantic coast, with a few scattered inland between the coast and Detroit. While the Chambers of Commerce in several cities between Massachusetts and Illinois have return loads bureaus in the course of formation, there are many other transfer and storage centers in that territory that should have a return loads bureau.

The transfer and storage men of each of these cities should get together, appoint a committee whose business it will be to organize a bureau. This committee should first call upon the local Chamber of Commerce or take it up with the Highways Transport Committee of Washington, or the State Council of National Defense, which may have a committee on this work, and try to get them interested. The committee should also call a meeting of the transfer and storage men and vote upon the establishing and maintaining of a bureau. This committee should get the co-operation of the transfer and storage men within a radius of 25 or 50 miles from where the bureau is to be established. This does not mean only the larger cities, but the towns where there may be only two or three transfer and storage companies. Besides, the transfer and storage men need not stand the full

cost of supporting the bureau, as they will find that the manufacturers will co-operate in every way possible if the idea is sold to them in the proper way.

A suitable method of forming this bureau should be similar to the method used by the New York Van Owners' Association. A complete description of this system was published in the June issue of *TRANSFER & STORAGE*.

New York Van Owners' Bureau

The Van Owners' return loads bureau has been a success from the very start. This bureau was put in operation April 1, but the income for that month was not sufficient to cover all overhead expenses. For the month of May the income was \$273, or 16 per cent over that of the previous month. This amount was sufficient to make the bureau self-supporting during that month. This does not mean that the bureau will be self-supporting as long as it exists, because the income will vary according to the seasons of the year, but it does mean that the bureau will continue to be a success if the transfer and storage men continue to use it.

Since the Van Owners' bureau has been established it has averaged five inquiries per day for return loads. It has given an average of one return load per day, and has received two prospects per day from warehousemen who have loads for other cities. During the time this bureau has been established it has received an average of \$15 per load for the work it has given out, half of which has been given to the informer.

How to Make Bureau Successful

No bureau will be a success until all transfer and storage men in the vicinity make the maximum use of it. Another thing that means success to the bureau and a greater profit to the van owners is the hauling of merchandise when it is not possible to get household goods for a return load. Many van owners have padded van bodies costing in the neighborhood of \$800, but in many instances the pads can be removed or rolled up and package goods, boxes, crates, etc., hauled back. This class of merchandise will not injure the sides of the body if packed properly.

Another thing that is essential to make a bureau successful is that the bureau know the financial standing of the transfer and storage men listed, or it would be still better if the men doing this work carried blanket insurance. If this was done it would increase the business of the transfer men, as the manufacturer would turn his goods over to any man without knowing anything about him and at the same time he would know that his goods were protected.



More Return Loads Bureaus Should Be Formed

BOTH labor and equipment in unorganized truck service between cities east of the Mississippi River is such that eventually every transfer and storage center will have to have a return loads bureau if this waste of man-power and equipment is to be eliminated.

Transfer and storage men can eliminate this waste and at the same time double their profits by getting together and appointing a committee whose work it will be to form a return loads bureau. It should also be the work of this committee to get the co-operation of transfer and storage men in other towns and cities within a radius of 25 or 50 miles where there is not enough shipping to operate a bureau on a self-supporting basis.

The return loads idea has been sold to the shipper located along the Atlantic Coast, but very little has been done in this respect in the transfer and storage centers west of Buffalo. This is another thing that the committee

should do. It should get out among the shippers and sell this method of transportation. This would be practically simple if the men who did overland haulage carried blanket insurance. By carrying blanket insurance, the shipper would be satisfied in turning his goods over to any transfer or storage man without knowing anything about him.

Now is the time for the transfer and storage men to get together and form these bureaus. They should not wait until the fall of the year, when they will be needed most. By forming a bureau now, they should be self-supporting by the fall of the year. The New York Van Owners' Association formed a bureau last April, and by June 1 it was self-supporting. If that body can operate a bureau successfully, there is no practical reason why transfer and storage men in other cities cannot do the same.

An Executive Secretary Needed

IT was shown again at the recent annual meeting of the National Team & Motor Truck Owners' Association that lack of co-operation in general on the part of the cartagemen who are not members of that organization makes it next to impossible to solve the problems that affect cartagemen nationally. While that organization has a total membership of over 700 engaged in the cartage business in certain sections of the country, this membership does not represent all sections. As a result it is difficult to take any definite action that will secure co-operation of men in this business generally.

In order to remedy this situation, many of the members have suggested that a field secretary be appointed who could devote his entire time to organizing local associations in every city of importance and who would work among these associations constantly in order to keep alive their interest in the national association. This would

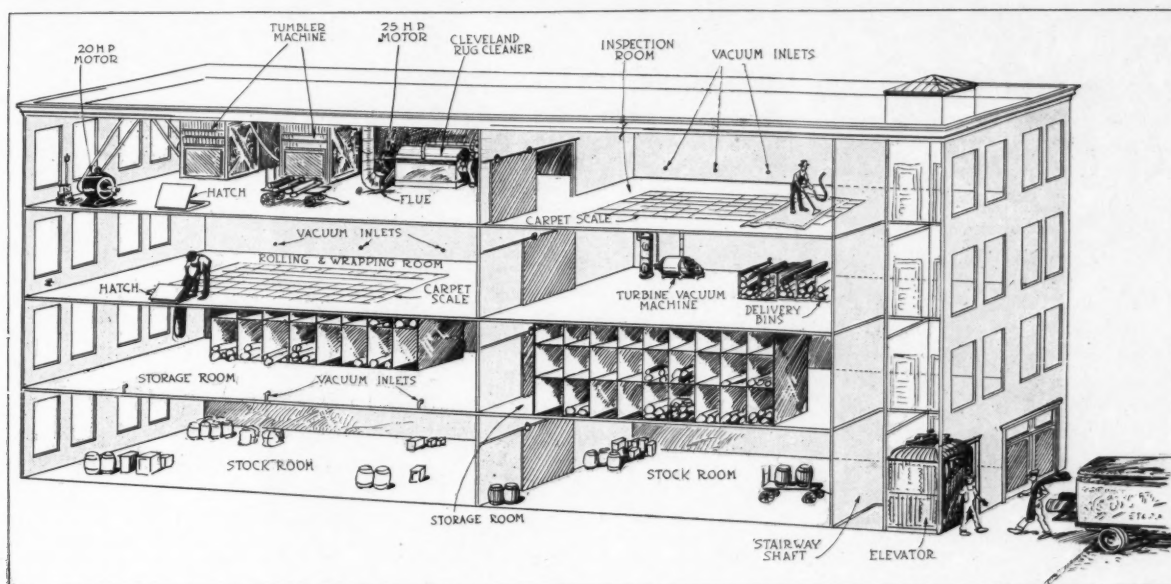
necessitate an appropriation of approximately \$5,000 a year to cover the salary and traveling expenses of such a secretary. Many of the members consider this too much of a burden to place upon the association at this time, but second thought will show them that a live executive secretary would secure this amount of additional revenue from the new local associations through the annual dues which these new members would pay into the treasury of the national association.

With a membership representing every section of the country, the influence of the association would then be great enough to secure the necessary reforms that are now needed by the men in the cartage business. The necessity of the appointment of such a secretary seems to be growing among the members and it is hoped that some time during the coming year the officers and directors will see the wisdom of adopting this suggestion.

The Illinois Convention

WE have delayed this issue for a full report of the Illinois Furniture Warehousemen's Association's annual meeting, and owing to the exigencies of the printing plant are obliged to place this report in a less conspicuous location than it deserves. Our readers, how-

ever, can find it on pages 33, 34, 35, 36 and 37, and over a hundred of them will find their portraits, which we hope will enable them to prove to those at home that they really spent those five days in serious business.



Prospective view showing the arrangement and layout of the Pioneer Warehouse's carpet cleaning plant

Big Profits in Cleaning Carpets

**Warehouseman Operating \$10,000 Worth of Machinery Cleans
Approximately 800 Yards of Carpet per Day—Receives
20 per Cent Income on His Investment**

WHEN a sideline grows to such an extent that it necessitates the use of an entire four-story building separate from the parent plant, it may safely be said to have financial possibilities that warrant serious consideration by all who follow the industry from which it grew.

This has been the experience of the Pioneer Warehouses in Brooklyn, N. Y., with the carpet-cleaning branch of its business. Starting with a plant only large enough to care for the work supplied by its storage and moving patrons, the company has developed this activity to the point where it not only handles its own cleaning jobs, but in addition takes care of the work of other storage warehouses and cleaning establishments which are operated on the percentage basis.

TRANSFER & STORAGE has come in contact with a number of warehousemen who operate carpet-cleaning plants, and practically every one of them has said that he is receiving a profit of between 15 and 20 per cent on his investment. These figures show that there is a large field in that business for at least one-

third of the warehousemen in practically every city.

The Pioneer Warehouses, Brooklyn, N. Y., invested \$2,500 in carpet cleaning machinery in 1897, and since that time its business has increased to such an extent that it now operates a four-story building, 25 by 200 feet, and \$10,000 worth of machinery for the dry cleaning of carpets and rugs. The building has a floor capacity of 20,000 square feet and is located in the heart of the business section.

Tumbler and Strap Machines

The system the Pioneer company uses in its carpet cleaning business is as follows: When carpets and rugs are received, they are loaded on a four-wheeled truck on the elevator, which is located at the front of the building. They are then taken to the fourth floor, where they are inspected and measured on a carpet yard scale. After this, they are conveyed to the rear of the building, and the carpets with strong backs are placed in either one of the tumbler machines. The carpets are held in place by internal retaining cams until they are car-

**Carpets
Cleaned!**

**PHONE PIONEER
Main 6900**

RUGS, CARPETS, DRAPERIES
Cleaned, Washed, Repaired,
Stored and Insured at Reason-
able Rates against Fire, Moth
and Theft at owner's valuation.
Most modern, sanitary plant
in Greater New York. Experts
in charge of all work, which is
strictly guaranteed.

OUR 39TH YEAR.

Pioneer

Fireproof Storage Warehouses

41 Flatbush Avenue, Bklyn., N. Y.

*Reproduction of advertise-
ment clipped from a New
York daily newspaper*

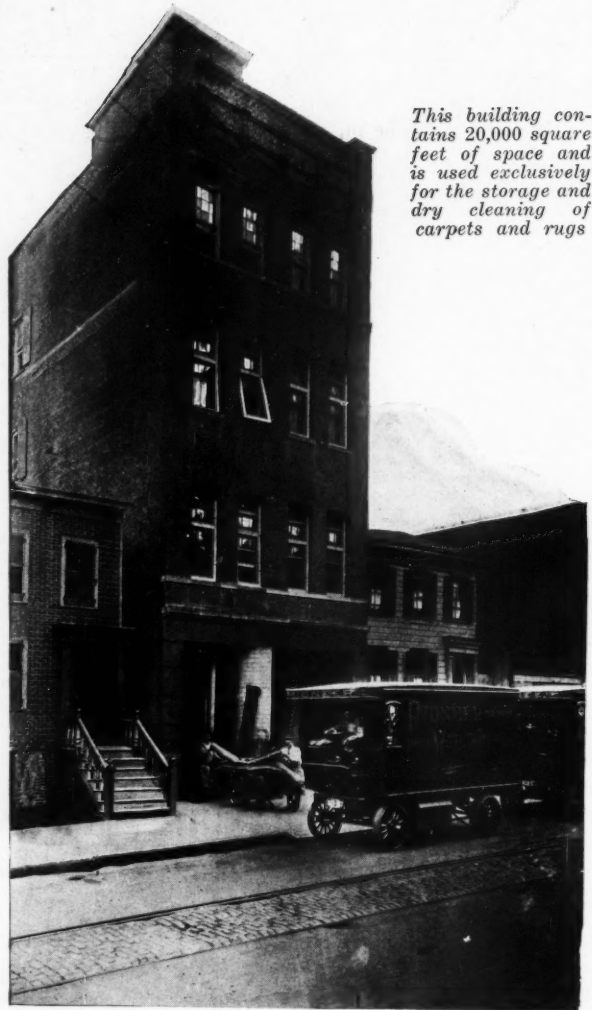
ried to the top of the machine. After they reach this point the cams release them and they are dropped to the bottom of the machine, loosening the dust and allowing it to be drawn by a 36-in. fan to the flue connecting with the roof. This motion is kept up until all dust has been removed. The machine is operated by a 20 h.p. motor and makes 18 revolutions per minute. It requires about 150 square feet of floor space, and has a capacity of cleaning between 200 and 300 yards at one loading. It can be purchased and set up complete with motor and all attachments for \$1,500.

If the carpet is not heavy and has not a strong back, it is placed in a Cleveland beater, brusher and vacuum cleaner machine, which cleans the carpet by beating it with a series of straps connected with a shaft. It will clean any carpet without increasing the size of holes or further opening up the seams or without injuring the most delicate fabric. The machine is 19 ft. 6 in. in length and requires a floor space of 125 square feet. It has a capacity of cleaning between 300 and 500 yards per day, depending on the kind of carpet. While the Pioneer uses a 25 h.p. motor to operate the machine, it can be operated with a 15 h.p. motor. The 19 ft. 6 in. machine can be purchased and set up complete for \$2,500, but smaller ones requiring about 20 feet of space and operated by a 7½ h.p. motor can be had for a price as low as \$1,550.

Always Use Vacuum Machine

After the carpets have been cleaned, either by the tumbler or the strap machines, they are sent down to the rear of the third floor where they are again gone over with a vacuum machine, which removes whatever dust has not been removed by the other machines. The 15 h.p. motor, the turbine fan, dust separators, receptacle and flue for this machine are located on this floor in the forward part of the building. This machine has fourteen inlets distributed throughout different parts of the building, and feeds a pressure sufficient to allow six men to

This building contains 20,000 square feet of space and is used exclusively for the storage and dry cleaning of carpets and rugs



This is the rolling and wrapping department at the Pioneer plant. It is located at the third floor rear. The company always has sufficient work to keep from two to five men busy in this department

work at one time from different inlets. This machine requires about 40 square feet of space and was purchased for \$2,500, which included the installation of the piping, etc. Smaller turbine vacuum machines with six inlets with a pressure sufficient for two men to work at once can be purchased for \$800.

After this work has been done, the carpets are rolled and wrapped on the third floor, and if they are to be stored they are sent to the second floor where they are placed in one of the specially constructed moth-proof rooms. If the carpets are not to be stored they are taken to the forward part of the third floor and placed in bins reserved for completed work which is to be delivered within the next day or two. The first floor is given over to the storage of supplies, such as wrapping paper, twine, moth preventives and other miscellaneous articles.

Spent \$5,000 on Advertising During 1917

During the last year the Pioneer company cleaned an average of approximately 800 yards of carpet per day. It is expected that during this year the amount cleaned will be 1,600 yards per day, or double that of last year. The reason for this is that the firm has been spending a greater percentage of its profits every year on advertising. During the last year \$5,000 was spent in this work, and as a result the Pioneer is better known to people who have their carpets and rugs cleaned regularly. The installation of the turbine vacuum machine will be of great assistance in handling the additional work which is expected during the next few months, because it will eliminate the running of heavy carpets through the other machines three or four times.

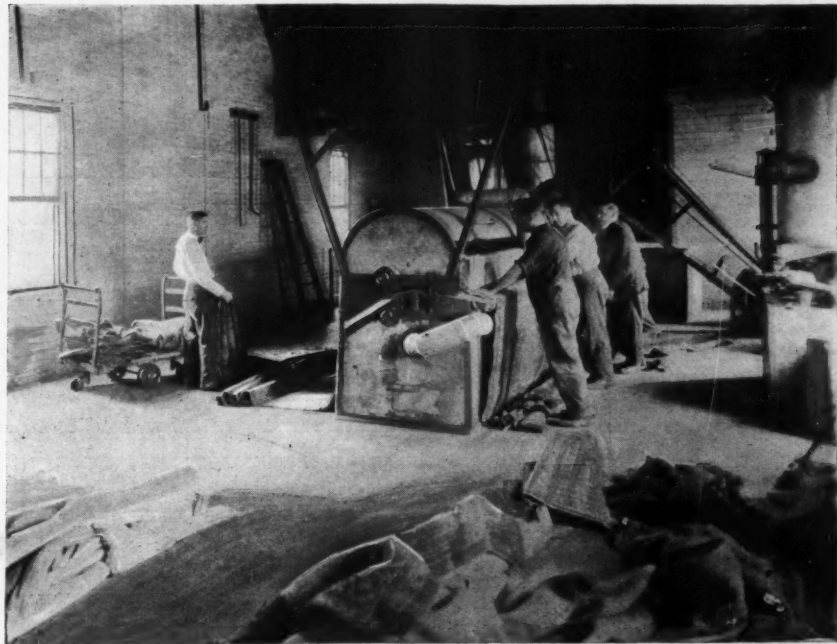
The Pioneer employs five men in the slack seasons, and as many as seven and eight in the busy seasons. The work the men do is as follows:

In the cleaning department a foreman and one helper are employed at a combined salary of \$48 per week, and in the wrapping and storage departments a foreman and two helpers at \$68 per week. These figures are based on the wages of five men, but, including the extra men in the busy season, the average wages paid per week the year round is about \$150.

Cleaning and Storage Rates

The rates charged by the Pioneer for this work are as follows:

For removing all dust and dirt by compressed air, the following prices are based on a standard carpet yard,



The illustration above shows a portion of the fourth floor, where all cleaning is done. The men on the right are placing a carpet in a Cleveland beating machine. The two tumbler machines are located at the rear of this floor

which is 27 by 36 inches. For ingrains, mattings, floor linens, velvets, wiltons and axminster carpets, 6 cents per yard is charged, and 10 cents for domestic rugs. For Oriental and foreign rugs, extra heavy goods, and Aubusson, 14 cents per yard is charged. For removing dust, scouring and shampooing, 40 cents per yard is charged for all grades of carpets and rugs.

For taking up, refitting and relaying, the following rates are charged:

Taking up	2 cents to 3 cents per yard
Refitting	90 cents per hour
Sewing	50 cents per hour
Relaying room carpets..	7 cents per yard
Relaying stair carpets..	15 cents per yard and upward
Relaying hall runners..	15 cents per yard
Relaying floor linens...	10 cents per yard
Carpet lining	12 cents per yard
Stair pads	\$2.50 per dozen

When goods are brought into the carpet cleaning plant and no valuation has been placed on them, a value of \$1 per yard is fixed as an insured value. If they are only to be cleaned, they are stored for 30 days free of charge, and after that time a monthly rate of 3 cents per yard is charged. The rate for storage on domestic carpets and rugs is 3 cents per carpet yard per month, and on imported rugs 3 per cent of the valuation of the goods as fixed by the owner. This insures them against fire, moths or theft for one year if left with the warehouse.

Other warehousemen who intend entering the carpet cleaning business should base their rates for storage according to the amount paid for wages, rent of the building, cartage, general upkeep, etc. This should also be done in fixing their rates for cleaning carpets.

Concerning Warehouse Co-operation

Readers Offer Suggestions to Facilitate Factory Distribution Methods

CONDITIONS in the merchandise distribution branch of the warehouse industry are being given much thought by the warehousemen of the country, as the following letters to *TRANSFER & STORAGE* indicate. These letters, written in answer to an article entitled "Wanted, Co-operation," which appeared in the June issue, are printed without comment.

Editor, *TRANSFER & STORAGE*.—The article on page 3 of your June number is hardly fair to warehousemen, and I am attaching some "thoughts" on this subject:

The article which appeared in the June number of *TRANSFER & STORAGE* made interesting reading for warehousemen, and deserves the attention of those who have made a practical study of distributing for large manufacturers. It is worth while to consider the several points brought out.

1st. This activity is not new, and eastern warehouses have been struggling with its various complications for a number of years.

2nd. The warehouseman does consider merchandise distribution an important part of his business, but many of the manufacturers seem to think that their account is the only one the warehouse has, and demand a "quantity" of service which it is hardly possible for a warehouse to devote to a single customer.

3rd. It is true that the manufacturers discover that each warehouseman has a system somewhat different from warehousemen in other sections of the country, but the warehouseman discovers that every manufacturer has a system entirely different from that of every other manufacturer, and many of these systems make the accounts undesirable.

4th. Warehousemen agree that there should be uniformity, and the American Warehousemen's Association and many local associations of warehousemen are spending energy and money to promote uniformity. If manufacturers using warehousemen as distributors are sincere in their demand for uniformity in this class of service, the subject should be presented to the American Warehousemen's Association with a request that a committee be appointed to confer with a committee appointed by the manufacturers to work out a plan for uniformity which will meet the

demands of both manufacturers and warehousemen.

5th. The three groups of dealings cited are only a few of the many classes of service the warehousemen are called upon to render in connection with distribution.

6th. Many of these manufacturers operate large traffic departments, and yet send the warehouses orders marked as stated in the above mentioned article, "Ship Cheapest Way." The cost to the warehousemen of determining the "cheapest way" frequently takes all the profit out of the business, and, in these days of embargoes, makes such accounts undesirable.

7th. Warehousemen perhaps are as familiar with all the phases of distribution as manufacturers are, and probably see it from more angles, and they have done much to make this service attractive to manufacturers.

8th. If manufacturers can bring themselves to realize the tremendous detail some of their accounts inflict on the warehousemen, and arrange to take care of this detail in their own offices, a uniform system can be instituted which we have no doubt warehousemen at every distributing point would gladly accept.

9th. Warehousemen generally are not poor correspondents, but the great volume of unnecessary correspondence which finds its way to the desks of busy warehousemen gives the impression that answers are not expected; in fact, a very large manufacturer was requested by a warehouseman not to write letters asking for certain information which under existing shipping conditions it was impossible to give, and the reply was, "Our system requires us to write these letters, but you need not answer them." Where is the fault in such cases?

10th. If the manufacturer keeps his records in good shape there should be no time when he

would have to depend on the warehouseman to tell him what stock he has on hand. If comparison of records is desired, he should send the warehouseman a copy of his stock record for the warehouseman to check. If this was done, probably some of the voluminous statements which are now thought necessary would be eliminated.

11th. Rates are the warehouseman's selling prices, and they vary just as the selling prices of the manufacturers vary. There are as many elements which enter into the warehouseman's rates as those of any other line of trade. This question is now the subject of investigation by the American Warehousemen's Association, and warehousemen throughout the country will be supplied with a standard basis for rates. Have manufacturers of any given article progressed this far? It is not intended to convey the idea that warehousemen in all parts of the States will have the same rates, but the method of figuring rates will be at their command.

12th. It is true that some distributors have found fault with rates, but that was because they were not acquainted with the warehouseman's costs of operation, and their idea of rates was probably the result of viewing them from the angle of their own profits.

13th. It is not quite clear why the warehouse should not charge for the various services performed; in fact, there is no other practical way. Some distributors ship their goods to the warehouse "marked," others require "marking." Some are stored, others are distributed without storage, hence blanket rates would not be fair.

14th. The article states, "Some effort should be made to standardize the warehouse business." That is not the solution. Some effort should be made to standardize "distribution methods" of both the manufacturer and the warehouseman.

The American Warehousemen's Association is the channel through which the movement should be inaugurated.

THOS. E. WITTERS,
General Manager,

Baltimore Fidelity Warehouse Co.

Baltimore, Md., June 7, 1918.

Editor, TRANSFER & STORAGE.—I have read with a great deal of interest articles in your valued paper written by Mr. Ficker, of the Bon Ami Co., and also your article in the June issue entitled "Warehouses Need Uniform System."

It may be necessary for warehouses to adopt a uniform system, but it will never amount to anything until manufacturers and distributors also adopt a uniform system.

I have been storing and distributing merchandise here for the past 18 years, and have never yet had a complaint made of the service given, as I

find the way to please my customers is to do business the way they want it done, and by their system.

I find that no two manufacturers or distributors wish their shipments handled in the same way, and that each has his own method of storing, distributing, reporting deliveries from his stocks and making stock reports.

It has always been my custom to handle these matters just as they want them handled, and in this way I have a pleased customer, and give satisfactory service. The thing then for us to do is to handle all goods entrusted to us as our customers want them handled, and not as we would like to handle them. If it is more expensive than our way, handle them the way they want them handled and charge a reasonable amount for the service.

If the Bon Ami Co. should carry stocks with me, I would handle them just as they directed me to handle them, and not like I handle the shipments of other manufacturers or distributors. If they wanted me to send customers receipts for goods delivered from their stocks sent them, I would send them. If they wanted stock reports made on a certain day and after a certain form, it would be my pleasure to furnish them.

I keep my records so that at any time I can give my customers a report of all stocks on hand or any other information they may desire. My records are very simple, but the entire stock of my warehouse can be taken by me without going out of my office door or counting any lot of goods in the warehouse. Good, clean, accurate records are worth more to a warehouse than any other asset.

I wish to say again that a uniform warehouse system is worth nothing, unless manufacturers and distributors also adopt a uniform system, and if they do not, the thing to do is to adopt their system. What does it matter if we have a dozen or more ways of doing things, if we please our customers, and we are sure to do that if we handle their business the way they want it handled.

I am, however, perfectly willing to adopt any system that is practicable.

HOLLINGSWORTH WAREHOUSES,

By JAS. H. HOLLINGSWORTH

Augusta, Ga., June 5, 1918.

CONSTRUCTIVE letters like the foregoing are of benefit to both distributor and warehouseman. By such an interchange of ideas the faults in the existing distribution system may be viewed from both sides, and remedies suggested

Barge Canal Rates Are Lower Than Railroads

Canal Tariff Is 20 per cent Below All-Rail Rate

FOLLOWING a conference held on June 22 with E. Chambers, Director of the Traffic Division of the Railroad Administration, A. H. Smith, regional director of the Eastern railroads, has been authorized to announce the differential that will make rates for shipments by the New York Barge Canal lower than rate by rail, under the new tariffs which were effective on June 25.

The New York Canal section of the United States Railroad Administration operating the State Barge Canal for the period of the war has been given authority by the Railroad Administration to publish rates on interstate traffic showing a differential under the advanced rates made effective on June 25 via all-rail, rail and lake, and rail, lake, and rail, under the Director General's Order No. 28 of May 25, as follows:

Class	1	2	3	4	5	6
Cents per cwt.	10	8	6	4	4	3

Regional Director Smith's traffic office, to set forth clearly the amounts involved in the rate changes prescribed by the foregoing decision, as applied to the new freight tariffs which went into effect June 25, made the following computations of present and former rates for the six classes of freight:

The previous New York-to-Chicago rates for freight carried all-rail, rail-and-lake or canal-and-lake, for each of the six classes of freight, stated in cents per 100 pounds, were:

Class number	1	2	3	4	5	6
Cents per cwt.	90	79	60	42	36	30

The new rates, which were effective June 25, apply to all-rail or rail-and-lake, for the same six classes of freight are:

Cents per cwt.	112½	99	75	52½	45	37½
----------------	------	----	----	-----	----	-----

With differential, to apply canal-and-lake, the rates for the six classes of freight are:

Cents per cwt.	102½	91	69	48½	41	34½
----------------	------	----	----	-----	----	-----

or a differential for canal-and-lake below all-rail or rail-and-lake of

Class number	1	2	3	4	5	6
Cents reduction	10	8	6	4	4	3

The previous New York-to-Buffalo rates, all-rail or canal, were:

Class number	1	2	3	4	5	6
Cents per cwt.	48	41½	34	23	19½	16

The new rates effective June 25, all-rail are:

Cents per cwt.	60	52	42½	29	24½	20
----------------	----	----	-----	----	-----	----

Canal rates, intrastate, to be 20 per cent below new all-rail rates, would

leave New York-to-Buffalo rate the same as it was or as follows for the six classes:

Cents per cwt.	48	41½	34	23	19½	16
----------------	----	-----	----	----	-----	----

Freight in classes 1, 2 and 3 includes merchandise of different grades almost entirely in less than carload lots. Class 1 includes dry goods, clothing, boots, shoes, hats and also automobiles in carload lots. Class 2 includes hardware, tools, etc. Class 3 includes high grade perishables, such as meats and fruits in carloads, and also pianos in carloads. Classes 4, 5 and 6 apply principally on carload shipments, including dried fruits, cereals, canned goods and various iron and steel articles. Grain, ore, coal and newsprint come under commodity rates.

New Inter-City Truck Line

PHILADELPHIA is now the center of long-distance motor truck hauling service which covers a territory from Washington to New England points. A new line was added when the Beam-Fletcher Corporation inaugurated a regular schedule between Philadelphia and Easton, Pa.

As soon as arrangements for receiving and shipping stations can be made, the service of this new division will be extended to include Allentown and Bethlehem, Pa. The section around Millville and Vineland, N. J., has already thrown a heavy volume of freight on the newly established triangular route, of which Philadelphia and New York form the other two points. Shipments are being taken from Philadelphia under contract to the New Jersey sections. There the trucks take egg shipments for New York, from where they carry general freight to Philadelphia.

New Government Plants

CONSTRUCTION of storage plants and camps planned by the construction division of the army will cost \$1,276,619,040, according to a statement issued in Washington on June 15.

Among the operations to be undertaken are storage terminals in Boston, Philadelphia, Charleston, S. C., and twenty-eight other points; Signal Corps cantonments and aviation fields; powder-loading plants west of the Alleghanies, and ordnance depots on the Atlantic Seaboard; housing for the Shipping Board at sixteen shipyards; quartermaster warehouses at Columbus, O.; Albany, N. Y.; Middletown, Pa., and Buffalo, N. Y.; aviation camps at forty stations; remount station at Charleston, S. C.

More Bonded Goods Now in Warehouses

Value of Stock on June 1 Was \$616,290 Over May

THE increase in the value of imported merchandise remaining in bonded warehouses on June 1 was \$616,290 over stocks in warehouses of May 1, according to statistics compiled by the Bureau of Statistics for the customs district embodied in the port of New York. The table compiled by the Bureau of Statistics placed the total on June 1 at \$75,501,915, as compared with \$74,885,625 on May 1, and showing a decline as compared with \$80,132,324 on June 1, 1917.

The value of the goods showed a large decrease, dropping from \$995,292 on May 1 to \$710,695 on June 1. The stocks of leaf tobacco and tobacco also showed large decreases, falling off about \$200,000 each. Other stocks showing decreases were bristles, coal tar colors, champagne, gum chicle, cutlery, olive oil and opium.

The stock of hat materials showed a large increase, approximately \$200,000. Linens gained about \$100,000 between April and May.

The following table gives a comparison of some of the most important articles, showing the stocks in bonded warehouses at the beginning of June, 1918; May, 1918, and June, 1917:

	June 1, 1918	May 1, 1918	June 1, 1917
Bristles	\$336,014	\$360,807	\$128,574
Coal tar colors	52,989	58,574	76,813
Stockings, hose and half-hose	47,639	46,288	193,734
Cotton laces			
all other	265,873	151,593	329,193
Cotton, other			
mfs	649,616		383,465
Gloves, kid, etc.	530,099	519,193	487,428
Silk clothing	374,531		408,247
Corn mfs	268,782	261,362	322,034
Cotton clothing			
all other	286,295	285,944	257,161
Linens	1,469,279	1,379,261	767,481
Yarns & threads	50,787	46,903	2,861
Furs, dressed on skin	112,127		103,406
Hat materials	818,556	637,254	596,652
Hats, bonnets & hoods	712,492	698,377	2,943,668
Tobacco, for wrappers	3,312,427	3,423,149	8,992,170
All other leaf	21,610,883	21,761,617	1,075,760
Champagne	1,010,731	1,062,830	6,493,073
Cane sugar	125,728	98,387	445,223
Wool, other mfs	437,069		
Wool clothing	259,588		272,786
Wool dress goods	387,416	370,911	1,096,302
Antimony	710,695	995,292	341,910
China, decorated	25,917	12,531	107,775
Acids, all other	220,928		126,867
Gum chicle	53,620	64,398	283,479
Plushes, velvets, etc.			263,745
Forgings, anti- friction, ball- bearings	2,046		68,244
Cutlery	4,358	5,650	2,902
Olive oil	128,978	142,429	259,317
Perfumery	384,833	313,875	241,498
Opium, contain- ing 90% mor- phine or over	439,442	446,852	112,958
Total dutiable	\$68,412,449	\$67,815,173	\$71,913,500
Total free of duty	7,089,466	7,070,452	8,218,824
Grand total	\$75,501,915	\$74,885,625	\$80,132,324

N. Y. Warehousemen to Hold Meeting

Annual Gathering at Asbury Park,
N. J., July 19-22

THE New York Furniture Warehousemen's Association will hold its twenty-first annual summer meeting and outing at the Hotel Monterey, Asbury Park, New Jersey, July 19, 20, 21 and 22. While this is not a convention year, it is expected that the meeting will not only be one of the best attended, but the program, which is printed in full below, shows that it should be one of the best ever held by that association.

The program is as follows:

July 19.—Members will assemble at the Central Railroad of New Jersey, West 23rd Street Station, New York City, at 4:20 p. m., or at Liberty Street at 4:30, arriving at Asbury Park at 6 o'clock.

Friday evening, "Carbery Night."—The committee has planned special "stunts."

Saturday, July 20.—Morning: Given over to bathing, boardwalk promenades and other amusements.

Afternoon.—Sight-seeing trip over the famous Ocean Drive, Atlantic Highlands, Highland Boulevard through a beautiful surrounding country, returning to hotel about 5 o'clock.

Evening.—Patriotic banquet at 7 o'clock; addresses and entertainment, followed by motor launch trip to Ross-Fenton Farm.

Sunday, July 21.—Morning: Bathing, etc. At 11:30 a. m. private cars will carry the members from the hotel to Port-au-Peck, to partake of one of Host Harlan's famous clam bakes. Those that attended the previous clam bake given by the association will remember it with pleasure, and this one promises to give all the "trimmings."

Monday, July 22.—Business meeting. During this meeting an auto trip has been arranged for the ladies to Lakewood, N. J., passing through the South Jersey coast resorts, Chicken Farm, Al-la-ire, Gould Mansion, Rockefeller's home, etc.

The members who wish to attend this meeting should secure their reservations from Charles Morris, secretary, 39 West 66th Street, New York City, not later than July 8, in order to insure transportation and hotel accommodations.

Boston's Workhorse Parade

THE sixteenth annual review of Greater Boston's workhorse parade took place on Memorial Day before hundreds of horse-lovers and other interested spectators. There were 789 entries, about 100 fewer than last year. The conditions and quality of those exhibited, in the opin-

ion of the judges and Henry C. Merwin, president of the association, were such as to make the review one of the best yet held, and fully up to the high standard attained in former years.

The Massachusetts S.P.C.A. gold medal was awarded to a pair of horses, twenty-one and twenty-two years old, which had been seventeen years each in service and had been driven in every parade of the Boston Association. In the veteran drivers' class, John B. Carberry received the silver medal offered by the American Humane Education Society for his forty-six years of service with his present employers.

A four-horse team of chestnuts, owned by C. Bowen, and driven by Frank L. Bavin, won the Lawrence gold medal awarded annually in memory of R. A. Lawrence, first president of the association. It was the team's sixth year in the parade. Several other prizes were awarded drivers and owners of horses in the championship class. The parade was held under the auspices of the Boston Workhorse Relief Association.

Increase of Express Rates Approved

TEN per cent. increase in express rates was approved on June 22 by the Interstate Commerce Commission, which disallowed an application for an increase of 15 per cent. The new rates will become effective as soon as the express companies file new tariffs, probably within two weeks.

This increase applies to the Adams, American, Wells-Fargo and Southern Express Companies, which were merged July 1 in a consolidated Government company doing more than 95 per cent. of the business. The increase will add about \$22,000,000 to the gross annual revenues of the new company. Three other companies, the Western, Northern and Great Northern, are expected to apply within the next few days for similar increases.

New Vehicle Tax

THE City of Indianapolis, Ind., has an ordinance which levies a tax on vehicles according to the number of horses used, or the weight in the case of motor vehicles. The rates are as follows:

1-horse wagon	\$4
2-horse wagon	6
1/2-ton truck	6
1-ton truck	11
1 1/2-ton truck	16
All over 1 1/2-ton	21

New Vehicular Tunnel Project Discussed

Senator Calder Prepares Bill
Recommending Tunnel

THE New York State Bridge and Tunnel Commission and the New Jersey Interstate Bridge and Tunnel Commission recently held a joint meeting at the offices of the New York commission for the purpose of effecting a scheme of organization. A secondary purpose of the meeting was to discuss the recent action of the Board of Estimate in appointing a committee consisting of Charles L. Craig, Comptroller; Frank L. Dowling, President of the Borough of Manhattan, and Alfred E. Smith, President of the Board of Aldermen, to co-operate with the New York and New Jersey commissions to devise ways and means of furthering the Hudson vehicular tunnel project. Twelve commissioners, representing the states of New York and New Jersey, were present at the meeting.

Both commissions organized by electing Thomas N. McCarter as chairman and E. W. Bloomingdale as vice-chairman of the joint commissions. The New York secretary, Morris M. Frohlich, was chosen as secretary to the joint commissions. Paul Windels was unanimously chosen as counsel to the joint commissions.

Since the above meeting a bill has been prepared by Senator Calder of New York recommending the construction of a tunnel for the use of pedestrians and vehicles under the Hudson River, to connect New York and New Jersey. Senator Calder intends to introduce this bill to the legislature during the last week in June. Under its provisions the cost of construction would be divided between the two states and the Federal Government.

Among the most important advantages arising from the construction of this vehicular tunnel would be the transportation of freight by vehicles between New York and New Jersey. General Goethals recently estimated that the tunnel could be constructed for \$12,000,000, and the land damage and purchase of easements and rights of way would cost another \$600,000, making a total of \$12,600,000. It was also estimated that it would accommodate on the most conservative calculation an annual traffic each way of 1,300,000 vehicles. With a toll of 30 cents for each vehicle and the receipts for the rental of conduit rights, the tolls within twenty years would be paying a bond issue with an additional net surplus of \$1,500,000.

N. Y. Team Owners' Annual Meeting

Recommend Coastwise Steamers Be Docked in East River

THE New York Team Owners' Association held its thirty-fifth annual meeting at the Hotel Brevoort, New York City, June 10. While there was only a fair attendance at the meeting, there were many important subjects brought up for discussion. Probably one of the most important was the necessity of having all coastwise steamships taken from the North River and docked along the East River in the neighborhood of 23rd Street. It was claimed that if this was done it would relieve a great deal of the congestion which prevails along the North River at present. A committee was appointed with R. L. Smith as chairman to present the association's suggestions before the Dock Commissioner. Since this meeting the committee has placed this plan before Commissioner Hulbert, who thinks very favorably of it. It is expected that within the next few days some action will be taken on this by Commissioner Hulbert.

Another subject which was widely discussed was the pooling of trucks. The gist of this discussion was that the association was willing to do all in its power to assist the Government. Mr. I. Goldberg was appointed as chairman of a committee to represent the association and to assist Interstate Commissioner Harlan in formulating a plan which would be of most benefit to the country in general.

R. L. Smith was re-elected president, this making his fourth term as president of the association. Other members elected to office were Jim Goldberg, vice-president; Edward Lowe, treasurer, and Wm. Becker, secretary.

More Barges Recommended

HEADED by Major Gen. W. M. Black, a committee of engineers and operators of barge lines on inland waters have recommended that seven tow boats and fifty barges, to cost \$7,350,000, be built for the Mississippi. The committee also advises the Director General that such equipment could handle 1,080,000 dead weight tons of freight a year, an almost certain preventive of such a condition as that in which 45,000 unloaded freight cars congested the eastern railroads at one time last winter.

Major Gen. Black, for many years one of the Government engineers, says there is a sufficient channel between

St. Louis and New Orleans for such service and that it could be operated during ten months in a year. Associated with him in the recommendations are Brig. Gen. Charles Keller, another Government engineer familiar with the Mississippi; G. A. Tomlinson, an operator of freight boats on the Great Lakes, who is now in charge of the New York State Barge Canal, and Walter S. Dickey, manager of the Kansas City and St. Louis Barge Line, which has been in operation several years.

This is the same committee which recommended use of the New York State Barge Canal, and the recommendations regarding the Mississippi were simultaneously made on April 8. Since that time the New York canal has been put into operation, but nothing has been done with respect to the Mississippi.

Higher Warehouse Rates

HIGHER warehouse rates have been granted to the warehouse owners of the San Joaquin valley, Cal., by the Railroad Commission. The rate for the storage of grain to January 1 has been increased from 75 cents per ton to \$1 per ton. The rate to June 1 has been brought up to \$1.25 per ton, and the charge for shipping grain through warehouses from 25 cents to 35 cents per ton.

Cash Freight Charges Postponed

DIRECTOR GENERAL MCADOO'S order, providing for the placing of collection charges for freight transportation on a cash basis on and after July, was ordered postponed until August 1, to give both the railroads and the shippers time in which to prepare for the change in bookkeeping and adjust themselves to the new conditions created by the order.

According to the Director General's postponement order issued June 12:

"The rule governing the collection of transportation charges prescribed in general order No. 25 is hereby amended and will not apply to transportation service rendered to:

"The various departments and bureaus of the United States Government.

"The nations allied with the United States in war.

"The various States of the United States.

"The counties and municipalities of such States.

"The District of Columbia and Alaska."

Committee Appointed to Control Exports

Will Route Shipments from Interior to the Seaboard

AN Exports Control Committee was created on June 20 by the Secretary of War, the Secretary of the Navy and the Director General of Railroads to determine the amount of freight which must be exported for war purposes and to route it from interior to seaboard points in such a manner that inland transportation congestion will be relieved and rapid delivery overseas assured.

The new committee, on which will be a representative of the nations allied with the United States in the war, will co-ordinate its work with that of the inter-allied Ship Control Committee, of which P. A. S. Franklin is chairman. The latter committee has under its jurisdiction the direction of all war shipping, and among its duties is that of instructing shipmasters where they are to call for cargoes.

Mr. Franklin is named as a member of the new Exports Control Committee. The others are Major Gen. Goethals, representing the War Department; Rear Admiral Peoples, representing the Navy Department; George D. Ogden, General Freight Agent of the Pennsylvania Railroad, representing the Railroad Administration, and D. W. Cook, selected as the agent of the British, French and Italian traffic executives in this country.

The committee will have headquarters in Washington and will meet there the first week in July to organize by selecting a chairman and secretary. An announcement issued June 24 contained the following:

"It shall be the duty of this committee to inform itself:

"(A) As to the probable amount of freight which must be exported for the prosecution of the war.

"(B) How this war freight can best be routed through the various ports.

"(C) How much of other essential export traffic has to be handled.

"(D) The amount of local traffic necessary for each port.

"The committee will have authority to select the port to which specified freight shall be transported for transshipment overseas for the use of the War and Navy Departments, the allied Governments, and others.

It shall be the responsibility of the committee to decide the distribution of the combined amount of all exports, as between the various ports, so as to facilitate its handling at, and avoid congestion in, any one port."

Storage Rates on Food to Be Regulated

Federal Food Administrator Appoints Committee

A COMMITTEE consisting of New York warehousemen, manufacturers and traffic managers was appointed by John Mitchell, chairman of the Federal Food Administration, and Arthur Williams, Federal Food Administrator for New York City, on June 22, to formulate a standard tariff on storage, labor and cartage of food-stuffs which the Federal Food Board, with the United States Food Administrator, could enforce.

The hearing was brought about by prominent flour dealers of the Produce Exchange, who charged that owners of warehouses have been exacting excessive storage charges. The warehousemen that were present contended that the extortionate charges were not being made by the "old-line" houses, but by the new enterprises which had just come into business.

As the discussion proceeded, the Federal Food Board decided that some action should be taken at once in at least three cases where excessive charges had been made. Summonses were issued and served on the owners of the warehouses which the charges were made against. A hearing is to be had during the next few days.

To establish standard rates and to classify the warehouses, the warehousemen have been requested to furnish the Food Board with a list giving the amount of products handled, the rates, etc., during each year from 1914 to 1918. This data is to be used to guide the Food Board in establishing rates and classifying warehouses.

Merchants Return Loads Bureau Holds Meeting

REPRESENTATIVES of Return Loads Bureaus of the States of New York, New Jersey, Pennsylvania, Massachusetts and Connecticut met June 13, at the assembly rooms of the Merchants' Association, to discuss the ways and means for obtaining the greatest co-operation among those return loads bureaus where routes overlap. These conditions exist principally along the Atlantic Coast where there are twenty-six bureaus located between the cities of Boston and Philadelphia.

It was brought out at the meeting that if the bureaus worked in harmony and kept in touch with each other, they could care more for the requirements of the local shippers.

After a general discussion on all sides, C. A. Musselman, chairman of the Highways Transport Committee, Council of National Defense, suggested that a committee be appointed with representatives from the States of New York, Pennsylvania, New Jersey, Connecticut, Rhode Island and Massachusetts to establish a policy as to rates, contracts, insurance and other questions, and to decide upon a definite form of organization.

J. C. Lincoln, manager of the Traffic Bureau, was appointed chairman of this committee. The other members are as follows: G. P. Wilson, Philadelphia; W. A. Way, Jr., Newark; F. E. Foster, Albany State Defense Council; R. Wallace, Jersey City Chamber of Commerce; M. B. Russell, Bridgeport Chamber of Commerce; F. W. Aldred, Providence Commercial Economy Board; D. C. Fennor, New York Motor Truck Club; W. S. Conning, Connecticut State Council of Defense, and I. M. Ulman, New Haven Chamber of Commerce.

Navy Commandeers More Bush Warehouses

THE Navy Department has commandeered four more six-story concrete warehouses of the Bush Terminal Co., of Brooklyn, N. Y. The commandeering of the warehouses included in the industrial group of the Bush Terminal property, running from Second to Third Avenues. The group of buildings houses sixty-four manufacturing concerns. Each building is 75 feet wide by 730 feet deep. Notice to vacate on or before December 1, 1918, has been served on each of the tenants.

Mr. Bush asked for a postponement of serving dispossession notices so that he might have a hearing, but the reply intimated that although the hearing would be granted there was no chance that the Navy Department would reconsider its decision. There are twelve buildings in the industrial plant of the Bush Terminal Co., so that the Navy Department has taken over one-third of the plant. One hundred and eighteen warehouses and eight piers operated by the Bush company were taken over bodily by the War Department on January 1 of this year.

Truck Drivers Licensed

A NEW ordinance requiring all truck drivers to be licensed was recently adopted by the Board of Supervisors of Imperial, Cal. The ordinance carries a fine of \$500 for any driver found operating a truck without a license.

Embargo on Shipments of Wool Lifted

Order Issued June 17, Covers C. L. and L. C. L. Lots

RAILROADS under Federal control were ordered by the Railroad Administration to lift all embargoes of shipments of wool, both in carload and less than carload lots, during the next sixty days. This order was issued and placed in effect June 17, principally because of the limited storage facilities at the point of origin.

The instructions of the Railroad Administration to the carriers were as follows:

"Practically the entire wool supply of the country has been commandeered by the Government to meet its requirements. Wool must be shipped from producing points to eastern wool centers for grading. The season for clipping is just closing and the facilities for storing at producing points are very limited.

"It is therefore necessary that arrangements be made for the prompt acceptance and movement of wool for the next sixty days in both less carload and carload lots to all destinations, particularly Baltimore, Philadelphia, New York, Boston and New England points generally, and any outstanding embargoes should immediately be modified accordingly.

"The freight traffic committee, north Atlantic ports, is amending its embargo, effective Monday, June 17, to permit unrestricted movement of wool shipments to Philadelphia. Very few such shipments are moving to Baltimore and New York, but the freight traffic committee having jurisdiction at those points is prepared to issue permits promptly on request of consignees if and as required. Prompt notice with full details should be given to the car service section if any consignee is delinquent in accepting and unloading wool shipments promptly, so that the War Department may take necessary action to either arrange immediate unloading or divert to the other consignees."

New Ordinance in St. Louis

ST. LOUIS, MO., now has in operation a new ordinance under the terms of which every public mover must be licensed, the fee of \$5 a year for each van or other conveyance being levied by the city. Before obtaining his license to operate, each public mover must file with the city a bond of \$2,000.

Warehouse Finds Profit in Handling Unclaimed Shipments

THERE is money in railroad shipments that are not claimed by consignees within the 24-hour period after arrival. The railroads are glad to do business with a warehouseman on whom they can depend to give careful attention to this class of work. The secret in building up such a branch of the industry lies mainly in going after the business.

These three principles in the handling of unclaimed goods shipped by rail or water have been proved many times by the Long Island Storage Warehouses, of Brooklyn, New York, which for many years have made a specialty of this class of work. Edward T. Jenkins, the president, does not look on this activity as a side line. He considers it quite as important as any other phase of his work, and therein lies the secret of the company's successful dealings with railroads and steamboat lines.

The Long Island Storage Warehouses handle the unclaimed goods of every railroad entering Brooklyn, as well as many of the steamship lines. Among the roads and boat lines for which they are the authorized receiving agents are Pennsylvania, New York Central, Baltimore & Ohio, Central Railroad of New Jersey, Erie, the Delaware, Lackawanna & Western, the New York, New Haven & Hartford, the Long Island system and the Old Dominion Line.

Has Personal Contracts

President Jenkins has contracts signed personally by the presidents of the Pennsylvania, New York Central and Long Island roads for the handling of the work for these lines. They are believed to be the only such documents in existence.

When a shipment arrives at a terminal, the consignee is at once notified and is given 24 hours from the time of notification in which to remove the goods. If the consignee fails to claim his goods within the time specified, they are taken at once to the Long Island Warehouses.

Such goods are then placed in storage and the warehouse sends the consignee a post card notification, reading as follows:

.....191
We have received for account.....
which seems to be consigned to you. There are
freight and other charges of \$..... Will you
call upon
Brooklyn, and get from them an order on us to
deliver to you? We do this so that further charges
may be saved you.

LONG ISLAND STORAGE WAREHOUSE,
Nostrand and Gates Avenues,
Brooklyn.

The consignee then calls for his goods, paying to the warehouse the amount it paid the railroad for shipping

charges, the haulage from the terminal to the house, and the storage fee. Such cases are simple.

In the case of improperly addressed goods or goods that cannot be delivered because the consignee cannot be found, another procedure is followed. These goods are held in storage by the warehouse for one year, at the end of which time they are advertised for sale in the newspapers once a week for two weeks. They are then sold at a so-called railroad sale.

Although the Long Island Warehouse management has found the work of handling unclaimed shipments profitable on the whole, there is an element of chance in the business that might not appeal to many warehousemen. For example, it is frequently necessary for the warehouseman to pay large advances to the railroads with little chance for getting his money back. If the goods are not claimed by the consignee, he must make whatever he can in selling them.

Storage Is Difficult

Another unsatisfactory feature of the business lies in the fact that such goods must always be stored where they are easily available. It frequently happens that a shipment unclaimed at the end of the 24-hour period allowed by the railroads is hurried to the warehouse and unloaded, only to be claimed by the tardy consignee within a few hours. The same amount of labor and handling is necessary as if the goods were to be left for a month or more. Over 33 per cent of the Long Island Warehouse is devoted to such storage.

Despite the fact that the short time storage means extra work and, in many cases, extra expense, the Long Island firm makes no special rate. Rates for a few hours are figured on the monthly basis. In the face of these difficulties, President Jenkins has found that financial loss from such transactions is comparatively rare. When it comes, however, it must be met by the warehouseman. As an indication of the importance the Long Island Storage Warehouses attach to the unclaimed goods branch, it may be pointed out that the company is at present planning the construction of a third warehouse, which will be used exclusively for the holding of these shipments.

The building will cost approximately \$20,000. It will be one story high and 200 feet long by 50 feet wide—a total capacity of 10,000 square feet of floor space. The aisles will be wide enough to permit the driving of a motor or horse-drawn vehicle into the building. The driver can back up to the pile where he is to get or leave his load, thus eliminating the necessity for extra warehouse labor to wheel trucks in and out, and also making unnecessary the use of mechanical devices.

In addition to this, the company has two warehouses in operation, both being used for household goods and merchandise, with a combined floor space of 202,000 square feet.

Government Co-operation Big Topic at the National Team Owners' Convention

Annual Report Shows Association Has 791 Members in Twenty-eight States, Operating 1,037 Trucks and 47,930 Head of Horses

A RESOLUTION that team owners throughout the country do all in their power to assist the Government in solving the freight problem by backing up whatever plans the Government recommended, and a discussion indicating the advisability of attempting to regulate the price of horse feed, were the two big thoughts brought out at the sixteenth annual convention of the National Team and Truck Owners' Association.

The meeting was held at the Hotel Breakers, Atlantic City, N. J., June 17, with an attendance of 26 members representing seven states. The meeting was opened by an address by President Ashford, who based his talk on "Our Country Is First." The president's address was followed by the reports of the secretary and treasurer. The secretary reported that local associations representing twenty-eight states were now affiliated with the National Association. His report also stated that the association has a membership of 791, and that these members operated 1,037 motor trucks of various capacities and 47,930 head of horses. Treasurer McDevitt, after giving his report, said there was a balance of over \$600 in the bank to the credit of the association. A finance committee was appointed and this report verified.

Discussion on Regulating Horse Feed

When one of the members suggested that the price of horse feed be regulated, a general discussion took place by practically all members present. It was brought out in this discussion that it would be folly to try to regulate the prices of oats, hay, etc. Even if the members were able to do so, there would be no benefit. As an example, one of the members said that the local Chicago association did this and were successful, but that they were no better off than before, as the standard price set by the Board of Trade made a maximum rate of 93 cents per bushel, and, ever since, the price has hovered around that figure, whereas in other cities, such as Philadelphia, Pa., and Buffalo, N. Y., the price is 88 and 86 cents.

Tail-board and store-door delivery, a subject very interesting to every team and motor truck owner in the country, especially those in the East, was next brought up, but there was practically no discussion on this subject worth mentioning. Most of the members seem to be satisfied not to discuss this subject, although everyone present said he would do all in his power to assist the Government in whatever plans it recommended. Later, a resolution was made that every local association affiliated with the national association should assist the Government in every way possible in solving freight or other problems.

There was quite some discussion regarding different rules in the constitution and by-laws. A committee was appointed at the last meeting held at St. Louis to revise the constitution and by-laws from the minutes of that meeting, but as this had not been done, the members had some trouble in settling various questions which arose from time to time. A new committee consisting of I. Goldberg, R. L. Smith and E. Lowe, all of New York City, was appointed to take up this work and revise the constitution and by-laws.

Officers and Directors Elected

The officers were next elected and are as follows: President, T. F. Ashford, Pittsburgh, Pa.; vice-president, F. J. Abel, Buffalo, N. Y.; treasurer, W. J. McDevitt, Cincinnati, Ohio, and secretary, J. Sproul, Chicago, Ill., were unanimously re-elected to office. Mr. R. L. Smith, president of the New York Team Owners' Association, was elected second vice-president of the National.

The directors elected to serve two years were: M. T. Green, Buffalo, N. Y.; Edward Lowe, New York; A. T. Barton, Kansas City, Mo.; C. A. Stockes, Duluth, Minn.; T. Counsell, Chicago, Ill.; G. Rickel, Cincinnati, Ohio; C. Cameron Minneapolis, Minn.; J. F. Flood, Pittsburgh, Pa., and C. Gleason, Philadelphia Pa. The following members were also elected to serve as directors for one year: J. F. Lang, St. Louis, Mo.; F. Walton, St. Louis, Mo.; C. Farrell, Philadelphia, Pa.; P. E. Strelau, Dubuque, Iowa; G. Morrey, Warren, Ohio; P. J. Finnegan, Chicago, Ill.; G. H. Obercline, Cincinnati, Ohio; C. E. Adamy, Buffalo, N. Y., and J. J. Blank, Pittsburgh, Pa.

Next Meeting at Buffalo

One of the members said that as there was practically no new business for the association to transact, the meeting should be adjourned that evening. Many of the members said that they should be home attending to their business, as they were short of labor and that there were many other things which arise from time to time which needed their approval. The motion was approved by practically all members present.

Before the meeting adjourned, the city of Buffalo, N. Y., was approved as the place for the next convention, but it was not definitely decided until after quite some discussion, as many of the members thought it should be held in their locality. Messrs. F. J. Abel, M. T. Green and C. E. Adamy, as a body, won out in this discussion after they had explained that Buffalo was centrally located and within reach of practically all members. The next meeting will be held on the third Monday in June, 1919.

The Expert Who Wasn't Sure

By G. A. GRAY

"I'VE understood," observed Callahan, as he tilted his chair back against the big safe marked "Callahan Storage & Warehouse Co.," "that there's a pile of money as well as no little honor to be gained if a man's an expert, but it's my own opinion that an expert should know something about the business he's an expert in."

Caleb Barker, Jr., son of Caleb Barker, Sr., and prospective occupant of his father's shoes as head of Barker's great but backward warehouse, said nothing. Callahan's reasoning seemed to be conclusive. There was no channel left open for a "come-back."

Ever since the days when Callahan, as a driver for Caleb Barker, Sr., had constituted himself mentor and guide to the infant Caleb, Jr., the young man had accepted such utterances as final. Even now that he had become a voter and a registrant under the draft law, Caleb looked on his father's former truck pilot as something of an oracle, in spite of the fact that the Callahans and the Barkers were business rivals.

"Take the law, for instance," continued the argumentative Mr. Callahan, after lighting his pipe and puffing a bluish white cloud in the general direction of the front door. "There you have a good example of what I mean."

Down in Black and White

"Say you contract with Joe Sweeney, down here on Market Street, to do some hauling for you. By the terms of the contract, he's to furnish you with six teams and trucks each day for a week and you're to pay him \$200. It's all down in black and white and the both of you understand it."

"Instead of that, Joe has three teams on the job, and he works only four days; then tries to collect the \$200. What do you do? You go to a lawyer and tell it to him. Does he say, 'All right, Mr. Barker, but I'm not sure whether we should have Mr. Sweeney indicted for mayhem or arrested for high treason?' He does not. He tells you right between the eyes that you can sue the aforesaid Mr. Sweeney for breach of contract."

"Then, again, say you have a sore throat and you go to a doctor. If he treats you for writer's cramp and housemaid's knee and painter's colic and lockjaw, just to see if he can get it right by accident, you kinda lose

Know Your Own Business

THE outside man or estimator is one of the most valuable employees of the household goods storage warehouse. He is the man who comes in direct contact with prospective patrons; he is the salesman for the house, and he is selling his employer's service. It is first of all essential that he know his business from the ground up. A pleasing personality and neat appearance are of almost equal importance.

confidence. Yes, sir, an expert's got to know something or he falls down on his job."

Caleb, Jr., looked up impatiently.

"Why, of course," he said, "an expert must be an expert, or else he isn't an—er—expert," he finished lamely. "Everybody knows that."

"Do they, now?" muttered

Callahan. "Did you know it when you sent young Spinks to figure on the Robertson storage job? Anyway, Spinks didn't. As an expert moving and storage estimator, Spinks is a wonder at taking a trial balance. That's why you lost the Robertson job and I got it. I know the whole story, my lad, and I feel kinda sorry. You're just a new-comer in the business, but your father should have known better than to send a man like Spinks to do business with a woman like Mrs. Robertson."

She's Got Class

"In the first place, Mrs. Robertson is a society woman, but she's also a business woman, for she takes care of all her own affairs. There's class to her, boy, a lot of it. Now comes Spinks, who knows no more about the storage business than he does about anything else, and that's nothing. He goes out there to the Robertson place buried in dust and he forgets to wear his collar."

"When the maid lets him in, he suddenly falls in love with his hat and doesn't take it off. Well, she shows him into that white and gold living room and he deposits himself and his load of warehouse dust in one of those spindle-legged chairs that wasn't made for a stevedore to sit in anyhow."

"That wasn't so bad, but it got worse when Mrs. Robertson herself breezed into the room. Now, I ask you, why should Spinks advertise the fact that he chews tobacco? His friends all know it, and Mrs. Robertson didn't give a whoop, if I may use the expression to indicate the lady's indifference. But little old Spinksy takes a handful of Dock Walloper's Delight and starts in to show how much he knows that isn't so."

"Now Mrs. Robertson is a broad-minded woman and she knows the horny-handed son of toil has his little peculiarities, so she tries to overlook the tobacco, but with all that white and gold furniture in the same room, she gets nervous. She's got a list of everything in the house. She wants it packed and stored for four months while



"Spinks starts in to show how much he knows that isn't so"

she's away in California. The paintings and the statues and the books and the old furniture are worth a lot of money, and she wants to be sure the people she leaves it with know how to take care of it.

Spinks Does Some Guessing

"Spinks didn't know for sure whether the paintings should be crated or each one wrapped and boxed separately. He thought the best thing to do with the statues would be to pack 'em in excelsior, but he didn't talk like he would bet he was right. When it came to that valuable furniture, he was up in the air high as Gilroy's kite. Some of it he'd crate; some would have to be boxed; some more would be all right if it was wrapped in burlap. He was talking himself right out the front door, but he didn't know it. He estimated the number of vans necessary as somewhere between five and ten, and that finished him. Mrs. Robertson told him to call again when she notified him."

"Well," explained Caleb, Jr., "since Danny Curtin, our old estimator, was called in the draft, we have been breaking Spinks in, and he doesn't know everything yet."

"Yes, you've been breaking Spinks in and driving business away," interrupted Callahan.

"Anyway, Mrs. Robertson was pretty fussy about her stuff," Caleb went on. "We wouldn't have that much trouble with the average job, and Spinks will learn."

"Let me tell you something, young man," said Callahan. "Your estimator is one of your biggest assets. I'm not sure that he isn't your biggest when it comes to getting

household storage jobs. He deals direct with the people you must depend on for your money. For the time being, he's the whole firm; anyway, the whole firm is judged by the impression he makes on your customer.

"If he is dirty and careless in his personal appearance, the customers wonder if he is a sample of what their goods will be if they are put in your warehouse. If he doesn't show symptoms of being a gentleman, or at least acting like one, he antagonizes the customer. If he isn't sure of his ground and if he doesn't know without guessing the best way to pack various kinds of household goods, or how many vans will be needed, or anything else they feel like asking him, he scares them off. They look to him to know the things they don't know. They can guess for themselves, but they expect him to know."

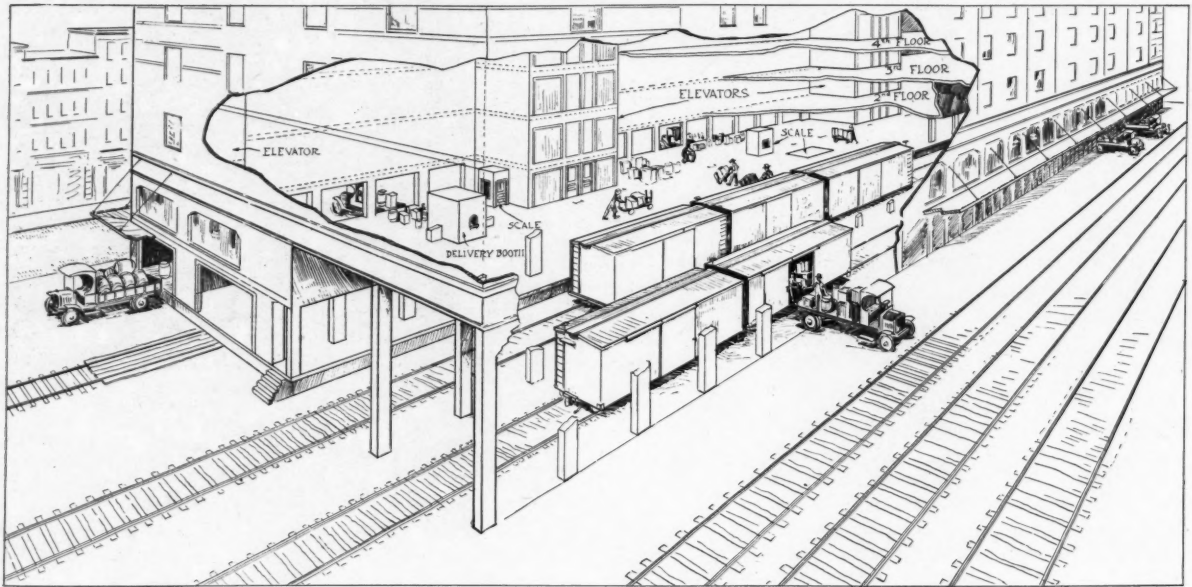
Estimator Is Salesman

"Your estimator is your salesman. He must know the thing he is selling well enough to convince the prospect that he is an expert and that he represents a whole firm of experts. Unless he knows the thing he is selling—the service your firm gives—he won't be able to sell it."

"As I said before, if an expert doesn't know the business he's supposed to be expert in, he falls down on his job. Don't spoil a good warehouseman by trying to make an estimator of him."

"Well, anyway, Spinks is a good man in the warehouse," said Caleb, making toward the door. "It might be a good idea to keep him there, and spend some money for an expert who knows how to expert."

Description of a Nearly Perfect Merchandise Warehouse



A view showing both the interior and exterior of the B. & O. warehouse at New York

Well Laid Out Building Gives Warehouse Greater Facilities for Handling Goods Efficiently

EFFICIENCY in merchandise handling and economy in labor were the big thoughts in mind in the construction of the Baltimore & Ohio warehouse in New York City. The result is that the complete plant today is one of the most nearly perfect merchandise warehouses in the United States.

The building itself is of modern fireproof construction and is five times as long as it is wide, or 376 by 68 feet, with a total floor space of 200,000 square feet. It is nine stories and basement and cost approximately \$500,000. Two brick fire walls divide the structure into three parts.

In the matter of efficient handling, the construction and system provide for a continuous movement of goods, incoming and outgoing merchandise being worked from opposite sides of the building. This feature results in the movement of an enormous amount of goods without confusion and without wasting man-power in unnecessary trucking. The floors were so planned that the greatest haul from elevators to any storage section is not more than 50 feet.

Not only conservation of man-power, but the conservation of men has been provided for. The use of white interior walls and the presence of a large number of windows make it possible to eliminate artificial lighting on all floors above the first.

The warehouse at present occupies only a part of the block on which it stands, but it is so constructed that in case it is desired to extend it the full length of the block, an entire wall can be removed without affecting any of the supports.

The basement is given over to the storage of oils, mineral waters and other liquids which are always kept a few degrees above the freezing point. The first floor is used for the receiving and distributing of goods, and the upper ones for storage. The warehouse is laid out with two tracks having a capacity of sixteen freight cars on one side of the building and a bank of six elevators and sixteen delivery doors on the opposite side. The incoming goods are hauled from the freight cars to the elevator by four-wheeled trucks, and then to the section where they are to be stored. Goods being removed from storage are brought down on the elevators and unloaded directly to the vehicles which are backed up to the elevator at the other side of the building.

Goods Piled by Portable Elevators

The B. & O. piles the goods in its warehouse in tiers from both sides of the building within 3 feet of the center. This allows a six-foot passage lengthways through the center of the building. Cross aisles have been elim-

inated because the majority of shipments received are large enough to fill one or more tiers between the three-foot mark and the wall. All goods of ordinary weight and size are piled by Economy elevators to within a few inches of the ceiling. Large hogsheads and other heavy cases that are too large to be stacked by piling machines are handled as follows:

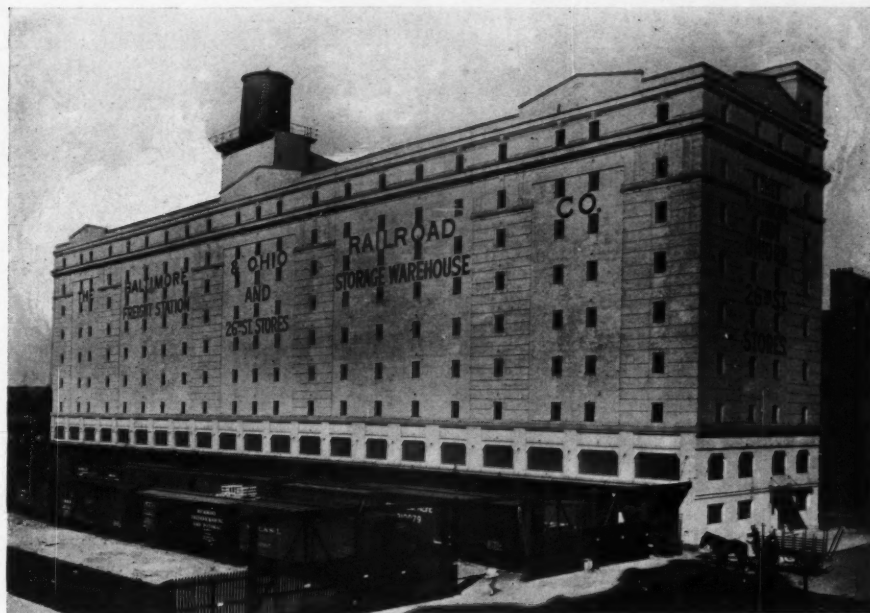
The B. & O. has had several false wooden bottoms of various heights made, the exact size of the platform of a four-wheel truck. When a hogshead is to be moved from an elevator to a pile six feet in height, a four-foot false bottom is placed on the truck, making its platform six feet in height. The elevator is then raised so that its floor is level with that of the truck platform. The hogshead is then rolled on the truck, moved to where it is to be piled and rolled in place.

Boxes and other heavy goods are handled the same way when moving them from the elevators to be piled on the storage floors, but rollers are placed under them when moving them from the freight car at the first floor to the elevators. This method of hauling goods not only eliminates the lifting of heavy cases, but it reduces the time required and the amount of man-power needed.

Warehouse Has Heated Storage Rooms

The office is located on the second floor front. It covers about one-third the area of this floor. This space and two large inclosed storage rooms for goods that must be kept above 40 degrees are the only parts of the building that have steam heat. There is also an eight-foot square delivery office, and three large automatic scales with platforms set flush with the floor located on the first floor.

The warehouse employs fifty men, including the clerical force, but during the last year it has been found almost impossible to get men to follow out its system of handling goods, and because of this fact it has had to refuse many valuable shipments during the last year. Before there was such a scarcity of labor, this warehouse had one of the most efficient systems of handling goods of any warehouse in the eastern part of the country; but even with its many features for doing the work systematically, it has been almost impossible to get men to stay long enough to give the results they should.

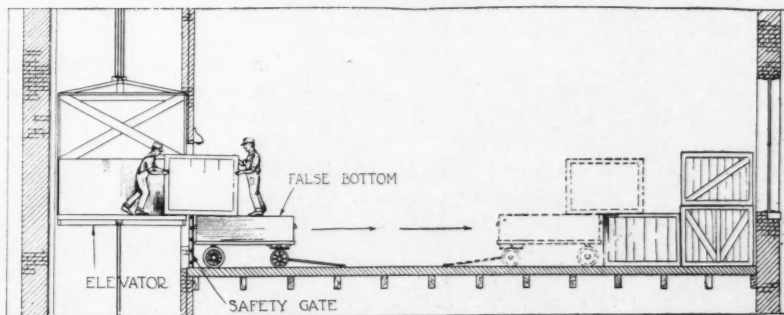


A view of the B. & O. warehouse, showing yard where merchandise is delivered and received by vehicles or freight cars that is not to be placed in storage

The B. & O. warehouse was built in 1914 for the purpose of handling goods shipped over the B. & O. lines. The warehouse will store and distribute practically all commodities handled by its lines, but will not touch any goods which are shipped over other lines. Many will wonder why it will not store goods for manufacturers in the immediate neighborhood who wish to keep spot stocks. The warehouse was not built for this purpose, but to assist the railroad in increasing its earning capacity and at the same time to give its customers a service which will reduce the cost of transportation.

Reduces Transportation Costs

For example: A manufacturer in Cincinnati ships his goods over the B. & O. to New York, and when they arrive he wishes to have them placed in storage. These will be placed in the B. & O. warehouse, because they were carried over its lines, but if they had been shipped over some other line, the B. & O. would not have stored them. If the manufacturer or shipper who wishes to store goods



The four-wheeled truck and the wooden false bottom are used to stack goods which are too heavy or bulky to be stacked by piling machines. False bottoms can be made of various heights, and with these goods can be piled the same height as the top of the elevator door. If the elevator door is 12 feet high the goods can be piled this height



Removing merchandise from freight car to elevator which is directly opposite. The freight cars are always spotted nearest the elevator which serves that part of the building in which the goods are to be stored

transports them over any railroad that has a warehouse, he reduces his transportation costs. The cost is reduced by unloading from the freight car direct into the warehouse, eliminating the cost of hauling from the freight car to a warehouse a few blocks away. Of course, this saving also applies to any warehouse having a railroad siding.

How Building Is Constructed

The construction of the building is modern, the face being of concrete and brick with hollow tile elevator shafts and brick fire walls. The main supports of the building are steel pillars incased in concrete, measuring 2 by 4 feet on the first floor and tapering to 2 feet square on the ninth floor. The pillars are located 14 feet apart. As these pillars are the main supports, an entire wall can be removed without affecting any of the other supports if it is desired to extend the building the full length of the block. By extending the building this way, it would eliminate the necessity of erecting an additional wall, which would reduce the capacity of floor space in both the new and old parts.

The floor carrying capacity is 600 pounds per square foot on the first floor, and is reduced about 50 pounds per square foot on each of the upper floors, giving the ninth floor a carrying capacity of 250 pounds per square foot. The height of the ceiling in the basement is 10 feet; the first floor, 13 feet, with a 19-foot archway 25 feet wide which is used for two sets of tracks having a total capacity of sixteen freight cars. The ceilings of the upper floors are 11½ feet in height.

Two Exceptionally Large Stairway Shafts

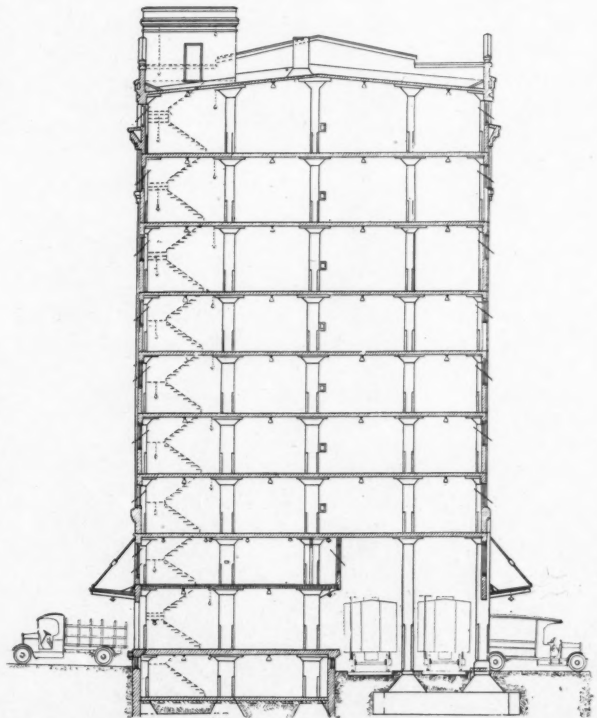
There are two stairways on the street side, each being one-third the distance from the opposite ends of the building. The stairway shafts are 10 by 15 feet, with a large well in the center extending from the first floor to the roof. Light is furnished in the shaft by two windows on each stairway landing. As the building is divided into three parts by fire walls and as these walls back up to the center of the stairway wall, two doors have

been installed so that either section of the warehouse can be reached from the stairway without having to enter one section and opening the fire door to reach the other section.

Six 10,000-lb. Capacity Elevators

The six elevators are all located on the street side, and have a carrying capacity of 10,000 pounds each. Two sets of these elevators are located on each side of the stairway, and their dimensions are 8 by 12 feet, while the other two are 12 by 16 feet. All elevators have two entrances, which fact makes it possible to load goods into them from one end and out at the other. As the elevators are all of the same carrying capacity, it was intended that they should be of the same size, but the ones alongside of the stairways were reduced about 4 feet so that the width of the stairway shafts would comply with the building regulations for a nine-story structure.

When the warehouse was first constructed, it was the intention of the officers of the B. & O. to erect a loading platform at the street side, but as the building extended out to the street line as far as the law would allow, permission could not be had to erect this platform. This does not affect the loading or unloading of goods from the vehicles into the warehouse at any of the sixteen delivery doors, outside of taking up space in the warehouse, but it does reduce the efficiency of the elevators to less than one-half when loading goods from them to vehicles. As there is no platform to place the goods on after they arrive at that floor, the elevators are held there until the vehicles are loaded.



A cross section of the B. & O. warehouse at New York, showing the first floor, where the goods are received and distributed, also the railroad siding, and the delivery yard at the right. All floors above the first are used for the storage of merchandise

Although the warehouse is of fireproof construction, it is equipped with an automatic sprinkler system having an 80-pound pressure which is fed by two automatically controlled pumps in the basement. There are also two standpipes with hose attachments located at each stairway landing. Distributed throughout the building are fifty-six metal tanks containing buckets filled with water charged with calcium chloride. Two 3-foot brick fire walls divide the building into three parts. The passage from one division to another is protected by two block tin fire doors, one on each side of the wall. If there should be a fire in any part of the building and these doors were open, a fusible link would melt when the temperature reached 150 degrees. The melting of the link would release the weights and the doors would close automatically, preventing the fire from spreading to other parts of the building. With this adequate protection, the contents can be afire in any part of the building without it affecting other divisions.



This illustration gives a general idea of how the B. & O. warehouse stacks its goods

Storing Records Eight Minutes From Wall Street

THE storing of commercial records is a profitable side line for any household goods warehouseman operating a warehouse located near a business center. If a warehouseman has vacant space or space that he is not getting enough revenue from, he can very easily take on the storage of commercial records—a side line which will not be a gamble, but will keep this space filled for an indefinite period.

The Pioneer Warehouses, Brooklyn, New York, has its main building located in the heart of the business section and within eight minutes' travel from Wall Street, New York. It had a large space allotted to the storage of automobiles, but as this class of storage was not profitable, the officers of the warehouse conceived the idea that the storage of commercial records would be more profitable. The warehouse advertised quite extensively in the

daily newspapers that it had fireproof rooms where banks and insurance companies could store records, etc.

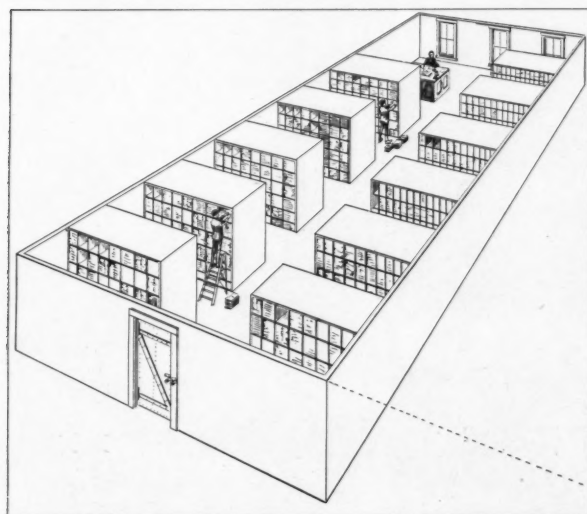
It took some time before the large banking and insurance companies came to the conclusion that it would be a good thing to have an office and store room in a fireproof warehouse where they could store valuable records. These records had to be stored in a safe place, and where access could be had to put them at a few moments' notice.

After the Pioneer had been advertising and putting its offer before these large companies, it was some time before they began to see the advantages of renting such space. A few leased a small space at first and they found this such a good method of storing old records that they later contracted for more space for one-half to three years. They installed offices at the warehouse to handle their business, also local telephone connections and private wires connecting the storage room with the main office.

At present the Pioneer Warehouses have leased 20,000 square feet of floor space to various companies storing commercial records. This space varies from one van load room of 50 square feet to the larger rooms containing 2,500 feet. The fitting up of the rooms is optional with the renter.

The rates for this class of storage are based on the square foot and according to the amount of space rented and the length of the lease. While this class of storage does not figure as much per square foot as the rate received for household goods, it offers a side line for any warehouseman having vacant space. He also knows that he will receive a regular income for that space until the expiration of the lease. Whereas with the storage of household goods the income is not always regular, because the goods may be in today and out tomorrow.

The maintenance and service that are required for this class of storage is more costly than furniture storage because it is more in constant demand. Light, heat and janitor service likewise must be taken into consideration. But with all this, there is, in the end, a big advantage in the space being occupied more steadily.



One of the commercial storage rooms the Pioneer Warehouses rent to banks and insurance companies for the storage of records, etc.

Letters from Readers

THE purpose of this "Letters from Readers" Department of TRANSFER & STORAGE is to serve as an open forum in which questions of interest and importance in the transfer and storage business may be discussed by the readers of the paper. It is intended also to serve as a source of information to those who desire to know about any phase of the transfer and storage business. If there is any particular problem facing you, write to TRANSFER & STORAGE for the information you desire, and if this information is not in the office, the editors will do their utmost to obtain it for you.

Cost of Maintaining Horse

Editor, TRANSFER & STORAGE: Will you kindly let me know the cost of keeping and hiring one horse and one team of horses per month in New York City?—F. I. S.

Reply.—With alfalfa at \$40 per ton and oats at \$1.15 per bushel, the cost of keeping a horse in New York City figures at \$1.58 per day, including overhead charges for stable, feed, shoeing and veterinary services, or approximately \$47.25 per month.

The cost of renting a single rig is \$168 per month, including a driver for 9 hours per day with an additional charge of \$1.50 per hour over the 9-hour period. The renter of the rig has to furnish his own labor for loading and unloading, or else pay the regular union wages for a helper. The cost of hiring a team is \$60 per week on a monthly contract basis which figures \$240 per month. This also includes a driver on the same basis as with the single rig.

The Meaning of "Freight Equalized"

Editor, TRANSFER & STORAGE: Would you kindly tell us the meaning of the words "freight equalized" when placed on an invoice covering a shipment of goods made by express. Reader.

Reply.—When a shipment of goods is made by express with a stipulation "freight equalized," the understanding is that the seller will charge no more than if the goods had been sent by freight. The seller agrees to send the goods by the quicker route and only make the ordinary freight charge to the buyer.

Overland Haulage Companies in East

Editor, TRANSFER & STORAGE:—We are starting an overland freight service over Eastern Oklahoma and would like very much to get in touch with some of the companies in the eastern states which are in this business. The writer has been a reader of your magazine for some time, and also has a copy of your 1918 Directory. Knowing that you are always in close touch with anything in this line, I felt sure you would be able to give us the names and addresses of several companies in our line of business.—Service Transportation Co., Muskogee, Okla.

Reply.—Following are some of the companies engaged in long-distance hauling in eastern states:

Erie Service Co., Buffalo, N. Y.; Empire State Motor Transport Lines, Inc., Rochester, N. Y.; Cressy Contracting Co., Boston; Woodside-Boston-Worcester Motor Haulage Co., Boston; Kibbe Bros., Springfield, Mass.; Hartford Dispatch, Hartford, Conn.; Whaley Motor Co., Hartford, Conn.; Warner Bros., Bridgeport, Conn.; New York & Philadelphia Auto Trucking Co., Inc., 54 North Front Street, Philadelphia, and 459 Canal Street, New York; Beam-Fletcher Corp., Philadelphia, Pa.; Baltimore & Belair Auto Express Co. and Baltimore & Washington Fast Freight Transfer, Baltimore, Md.; D. G. Dery, Allentown, Pa.; J. B. Owen, Clarksboro, N. J.; Westfield Storage Warehouse, Westfield, N. J.

To Repair Concrete Floors

Editor TRANSFER & STORAGE: Some time ago we read in your publication a suggestion for repairing concrete floors which are subject to heavy traffic, with a sort of cross-section of iron. We would be pleased to receive any information on this subject you may have.—Dochtermann Storage Warehouse Co.

Reply.—The following is reprinted from the December, 1917, issue of TRANSFER & STORAGE:

"Whenever a part of the floor needs repairing, a section two feet square, or a multiple thereof, is taken up and relaid in the manner outlined here.

"All old concrete including the base or foundation is entirely removed and a new base laid to within an inch and a half of the top of the finished floor. Cast iron grilles in sections two feet square are then laid on this base and the top or finishing coat of concrete is laid in and around the cast iron. Each grille is approximately two feet square with bars one and a half inches thick by one-quarter inch wide, forming open squares two inches on a side.

"With these cast iron grilles it is only necessary to allow the concrete to set for a short time. The grilles take all the wear and load from the trucks, the concrete acting as a means of holding the grilles in place. Grilles would be rather expensive to lay all through a new floor. They are only needed in the trucking aisles, and when placed there will be found to pay for themselves many times over. On repair work they are placed in the floor a few at a time and only on the more expensive work, thus distributing their cost so evenly that it is hardly apparent."



F. L. Bateman, Association
President, Trans-Continental
Freight Co., Chicago, Ill.

Win the War

Central Idea of the

Illinois Convention

Warehouse Industry Must Mobilize All Its Resources to Assist in the Nation-wide Movement to Conserve Man Power

MOBILIZATION of the warehouse industry to the end that all its resources may be made to take their proper places in the nation's "win-the-war" program was the central idea about which revolved all the business sessions of the twelfth annual meeting and summer outing of the Illinois Furniture Warehousemen's Association held on June 21, 22, 23, 24 and 25 at Elkhart Lake, Wis.

The customary questions that in years past have formed the topics for the principal deliberations of the association were to a large extent put aside for individual solution. As a body, the 150 or more members who attended turned their attention to the outlining of a campaign of procedure by which they can be of immense service in speeding up the war.

The keynote of the convention was struck on the opening day by Charles S. Morris, of the Metropolitan Fireproof Storage Warehouse Co., New York City, when he demanded of the members what their answer would be if the Washington authorities should ask pointblank on what authority the warehouse industry could request its fair proportion of the country's man-power to carry on its necessary activities.

Must Show Right to Men

Mr. Morris explained that as yet such a condition is largely theoretical, but he insisted that unless the warehouses of the country can show their right to demand the services of men, they must prepare in whatever way lies open to do an ever-increasing volume of business with an ever-decreasing amount of labor. He urged the members to consider seriously the use of women to take the places of men in as many warehouse activities as possible, pointing to the example already set by the women of England who have entered lines of work heretofore foreign to them in order that the man-power of the nation

may be devoted to the business of carrying on the war.

"Is there a possibility of our business being declared a 'non-essential,' and if so, what would follow?" was the topic suggested by Mr. Morris for discussion.

"Women can pack boxes, crates and barrels as well as men," said Mr. Morris, "and the time will come, if this war is prolonged, when we will lose our man-power. Therefore, it is necessary that we consider now what we will substitute in its place."

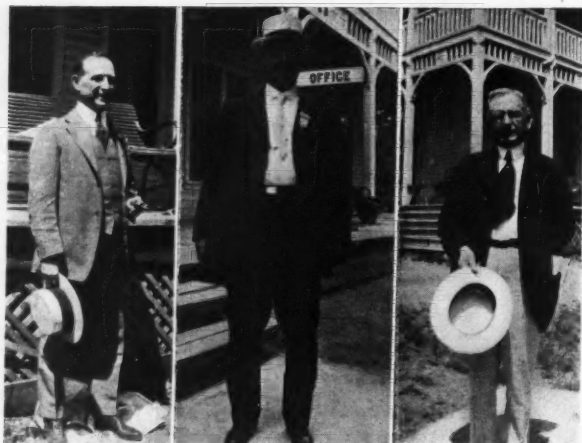
Out of the discussion that followed it developed that several of the members are already using women estimators, and it was shown that large manufacturing plants throughout the country employ many women and girls in their packing departments.

"It seems that we are a step behind," said President F. L. Bateman of the Trans-Continental Freight Co., Chicago. "I will go so far as to predict that the time will come when our vans and trucks are operated by women. It is very evident that we must prepare ourselves accordingly."

The spirit of co-operation with the government in its war work was again evidenced when Thomas Y. Leonard, of the Leonard Warehouses, Inc., Detroit,



Ralph J. Wood, Association
Secretary, Lincoln Warehouse & Van Co., Chicago, Ill.



Charles S. Morris,
Metropolitan
Storage Ware-
house Co., New
York City

William Stacey,
The Stacey
Auction & Stor-
age Co.,
Cincinnati, Ohio

James T. Keenan,
Hough & Keenan
Transfer & Stor-
age Co.,
Pittsburgh, Pa.



F. H. Hebard,
Hebard Storage &
Van Co.,
Chicago

Clarence J. Neal,
Neal Fireproof
Storage Co.,
Cleveland, Ohio

W. Lee Cotter,
Cotter Transfer &
Storage Co.,
Mansfield, Ohio

Mich., offered a resolution directing the members to hold in storage for the duration of the war all household goods left with them by men who have gone into the Army and Navy, irrespective of the condition of the account. This resolution was unanimously adopted, the members contending that men who offer their lives for their country must not be allowed to worry over unpaid storage bills or fear that their belongings will be sold for unpaid storage.

As the climax of the "win-the-war" spirit, the warehousemen turned their annual banquet at the Schwartz Hotel on the night of June 24 into an impromptu Red Cross drive, under the leadership of Frederic Fehcheimer, Lincoln Warehouse & Van Co., Chicago. Following an inspirational address in which Mr. Morris worked his hearers into a fever of enthusiasm, subscriptions to the Red Cross began to deluge him. In amounts ranging from \$1,000 to \$1, the money poured in until within two hours the 150 men present at the banquet had subscribed over \$10,000. The New York Furniture Warehousemen's Association Bulletin donated a page, which was auctioned off for \$300; the Van Owners' Association Bulletin, a page, \$100; the Illinois Furniture Warehousemen's Association Bulletin, a page, \$500, and TRANSFER & STORAGE, a page, \$200.

"Careless Correspondents"

After two days of entertainment, the business sessions of the annual convention opened in the Hotel Schwartz Casino at 9:30 o'clock Monday morning, June 24. Following the brief address of welcome by President Bateman, the secretary's report was presented by Ralph J. Wood, of the Lincoln Warehouse & Van Co., Chicago. Secretary Wood dwelt at some length on the carelessness of members in answering correspondence and made a plea for increased co-operation. In connection with the failure of association members to answer letters from the secretary's office promptly, Mr. Wood pointed out that his efforts to learn the amount of packing materials used in a year by the various firms had resulted in replies from only 77 of a total of 308 members. This information, gathered in the interests of the association's investigation of co-operative buying for its members, is as follows:

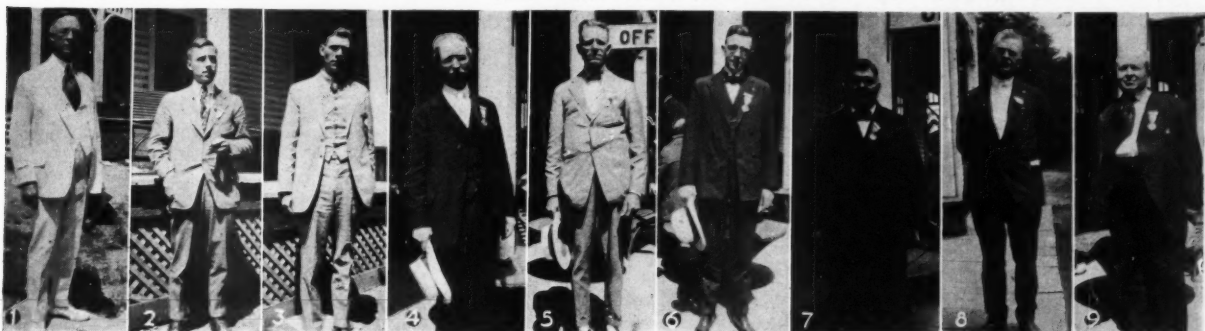
Two million, two thousand lbs. excelsior; 150,546 lbs. newspapers; 3,082,000 ft. 1 x 4 in. lumber; 1,136,000 ft.



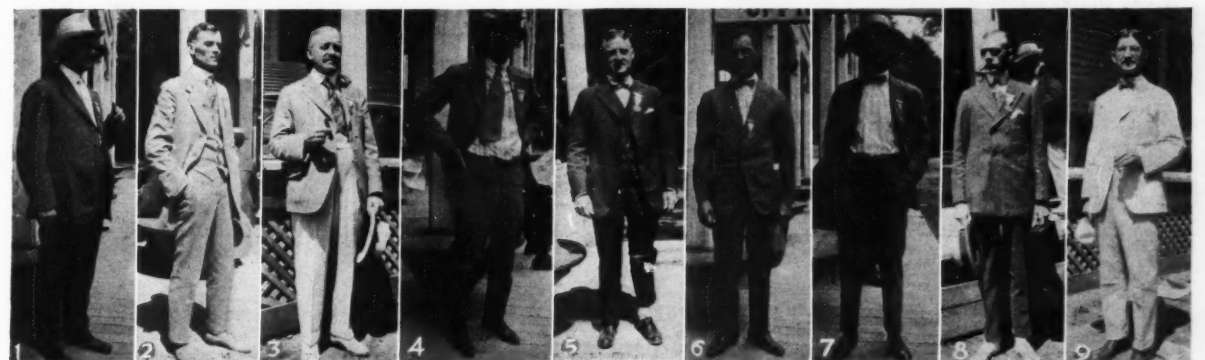
1—W. T. Bostwick, The Thomas J. Stewart Co., New York and New Jersey. 2—Howard J. Latimer, Cleveland, Ohio. 3—H. C. Schroeder, Hogan Transfer & Storage Co., Indianapolis, Ind. 4—T. A. Jackson, Jackson's Express & Van Co., Chicago. 5—D. F. Shanahan, Shanahan's Transfer & Storage Co., Pittsburgh, Pa. 6—E. M. Radcliffe, Radcliffe Storage Co., Grand Rapids, Mich. 7—Frank E. Scobey, Scobey Fireproof Storage Co., San Antonio, Tex. 8—Charles H. Kaufman, Kaufman Fireproof Storage Warehouse, Baltimore, Md.



1—H. O. Dannenburg, United Storage Co., Milwaukee, Wis. 2—Louis Schramm, Chelsea Fireproof Storage Warehouse, Inc., New York City. 3—C. A. Ward, Electrical Supply Co., Chicago. 4—B. G. Miller, Miller North Broad Storage Co., Philadelphia, Pa. 5—T. L. Morton, Model Storage Warehouse, Newark, N. J. 6—Harder Beebe, Jackson, Mich. 7—J. S. Wagner, Wagner's Transfer & Storage Co., Springfield, Ohio. 8—Charles E. Campbell, Campbell, Security Fireproof Storage Co., Vancouver, B. C. 9—Joseph H. Meyers, Federal Fireproof Storage Co., Chicago



1—George E. Turner, Turner Moving & Storage Co., Denver, Col. 2—E. A. Murdock, Murdock Storage & Transfer Co., Pittsburgh, Pa. 3—John G. Martin, Jr. 4—J. S. Kilgallan, Joyce Bros. Fireproof Storage Co., Chicago. 5—H. E. Hendrickson, Union Transfer & Storage Co., Madison, Wis. 6—H. M. Burgeson, Drexel Storage & Transfer Co., Chicago. 7—William E. Good, Dayton, Ohio. 8—Edward E. Waldren, Waldren Express & Van Co., Chicago. 9—E. H. Depenthal, Depenthal Truck & Storage Co., Toledo, Ohio



1—R. W. Weicker, Weicker Transfer & Storage Co., Denver, Col. 2—E. M. Bond, The E. M. Bond Fireproof Storage Co., Nashville, Tenn. 3—Charles B. Strang, Strang's Montauk Storage Co., Brooklyn, N. Y. 4—L. L. Hamman, Hamman Bros. Transfer & Storage, Decatur, Ill. 5—H. A. Blanck, The Blanck Transfer & Storage Co., Pittsburgh, Pa. 6—S. T. Bekins, Bekins, Household Shipping Co., Chicago. 7—John Sherman, City Transfer Co., Tampa, Fla. 8—William Billot, Judson Freight Forwarding Co., Chicago. 9—C. A. Dugan, Lincoln Safe Deposit Co., New York City



1—H. H. Howard, Denver Transfer & Warehouse Co., Denver, Col. 2—S. M. Woodson, D. A. Morr Transfer & Storage Co., Kansas City, Mo. 3—George C. Harris, Harris Transfer & Warehouse Co., Birmingham, Ala. 4—K. A. Werner, Werner Bros. Fireproof Storage Co., Chicago. 5—William Stacey, The Stacey Auction & Storage Co., Cincinnati, O. 6—George Delcher, Delcher Bros. Storage Co., Jacksonville, Fla. 7—Martin O. Oeterson, Park Fireproof Storage Co., Chicago. 8—J. H. Ring, Bekins Household Shipping Co., Chicago. 9—H. Lutzenkirchen, Chicago Furniture Forwarding Co., Chicago

1 x 6 in lumber; 459,000 ft. 1 x 12 in. lumber; 282,000 ft. 1 x 12 in. re-sawed lumber; 194,000 lbs. sheet wrapping paper; 184,200 lbs. roll wrapping paper; 30,000 lbs. tissue paper; 4,060 lbs. tacks; 1,182,000 excelsior pads, 6 x 36 in.; 571,000 excelsior pads, 8 x 48 in.; 27,787 lbs. moth preventative; 284,635 yds. burlap; 69,562 lbs. jute wrapping twine; 14,395 lbs. India hemp twine; 7,050 rug poles; 50,179 boxes; 50,407 barrels; 40,000 lbs. waxed or oiled paper; 214,622 lbs. nails; 256 gross screws; 2,284,000 tags; 8,133 piano boxes; 394 bbls. oil; 13,300 lbs. grease; 998 doz. van quilts; 81 tarpaulins; 39 doz. blankets; 63 doz. feed bags, and 332 piano covers.

Question Is Local

The question of co-operative buying, Secretary Wood said, has been found by the association to be local rather than national, and hereafter will be handled on that basis. Mr. Morris, for the New York City Warehousemen, supported this contention.

Secretary Wood's report concluded with the statistical statement showing a total of 308 members—38 active and 270 associate. During the year the association has prepared a map of Chicago, showing the location of warehouses, freight stations, team tracks and the various city

streets. The uniform shipping instruction form is now in use by 25 per cent of the members.

The first paper was read by Mr. Morris, of New York, the topic being, "Giving Consideration to the Ever-increasing Overhead." Due to the war, the speaker said, many changes are necessary in business; above all, it is more than ever important now that the merchant or warehouseman should know what it costs him to do business.

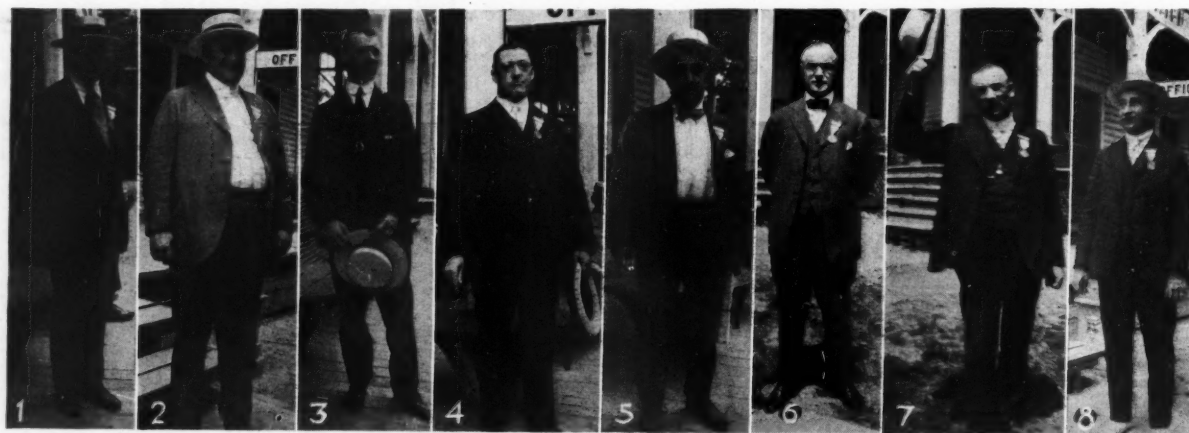
"A recent bulletin of the Federal Trade Commission," said Mr. Morris, "quoted Commissioner Hurley as saying, 'A merchant, in order to price his goods correctly, must know his overhead expense.' As an instance of failure to know this item, he cited the following as an example:

In figuring overhead, Mr. Morris said the following items are of vital importance: Interest rates, rent, labor, insurance, heat and light, organization expenses; non-productive labor, such as supervision, foremen, office force and executives; advertising and cost of getting business, wear and tear, replacement and depreciation, non-productive space, materials used in productive and non-productive departments, per cent of idle hours, bad accounts, wastage, claims and repairs.

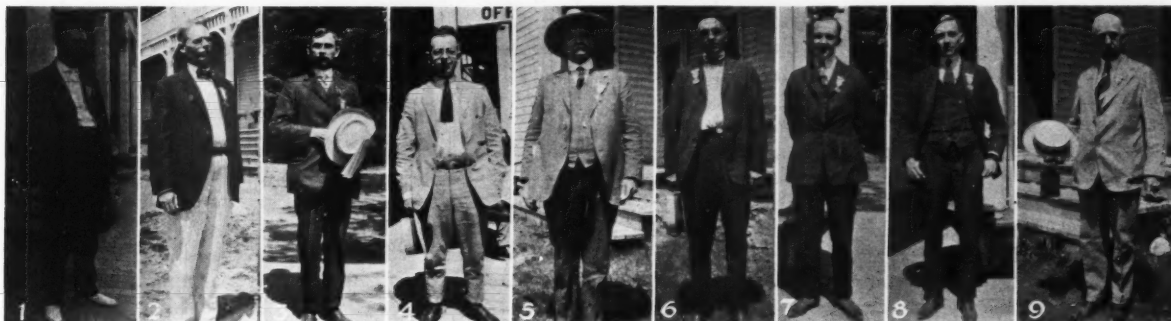
"With the increasing overhead in operating a warehouse, should prevailing storage rates be increased? If



1—L. H. Tanner, Central Storage Co., Detroit, Mich. 2—G. B. Anderson. 3—R. G. Taylor, William A. Iden Co., Supplies, Chicago. 4—Charles E. Fox, Empire Storage & Van Co., Chicago. 5—Bert McLane, A. B. C. Fireproof Warehouse Co., Kansas City, Mo., and Arthur C. Schick, Merchants Transfer & Storage Co., Davenport, La. 6—R. O. Jackson, Frank Shellhouse Fireproof Storage, Indianapolis, Ind. 7—Grover McHugh, Electrical & Specialty Supply Co., Chicago. 8—Rosalvo E. Orcutt, Orcutt Storage Co., St. Louis, Mo.



1—B. A. Eulas, Chicago. 2—W. H. Langdale, Langan & Taylor, Storage & Moving Co., St. Louis, Mo. 3—George R. Barclay, Chicago. 4—Norman B. Lavers, Transfer & Storage, Chicago. 5—Albert H. Hollander, Hollander Fireproof Warehouse, Chicago. 6—W. H. Turner, Lincoln Fireproof Storage Co., Cleveland, Ohio. 7—C. W. David, David Fireproof Storage Warehouse Co., Chicago. 8—Frank W. Zech, Detroit Storage Co., Detroit, Mich.



1—F. S. Elston, Elston Packing & Storage Co., Grand Rapids, Mich. 2—P. J. Mills, White Line Transfer & Storage Co., Des Moines, Ia. 3—William A. Iden Co., Supplies, Chicago. 4—William J. Connor, Flagg Storage Warehouse Co., Syracuse, N. Y. 5—M. B. Driver, Students' Express & Transfer Co., Berkeley, Cal. 6—J. S. Thrasher, Euclid Avenue Fireproof Storage Co., Cleveland, Ohio. 7—H. F. Roehl, Roehl Bros. Storage, Detroit, Mich. 8—Earl C. Iredale, Iredale Fireproof Warehouse Co., Evanston, Ill. 9—F. C. Hackett, Toledo Warehouse Co., Toledo, Ohio



1—A. F. Porter. 2—William Voelker, Garfield Park Storage Co., Chicago. 3—E. C. Shaner, Judson Freight Forwarding Co., Chicago. 4—John E. Withers, Withers Transfer & Storage, Miami, Fla. 5—Morris O. Slayback, Traffic Club, Chicago. 6—F. B. Phillips, Columbia Storage Warehouse, Chicago. 7—F. C. Lancaster, Bekins Household Shipping Co., Chicago. 8—W. R. Hoag, Trans-Continental Freight Co., Chicago. 9—R. L. Orcutt, Orcutt Storage Co., St. Louis, Mo.

so, to what extent?" was the question brought up for the first open discussion. It was generally conceded that storage rates will be increased, but the amount of the increase is largely problematical, being governed entirely by local conditions. Speaking for Cleveland, Ohio, Clarence J. Neal, of the Neal Fireproof Storage Co., said the warehousemen of that city had been forced to take cognizance of labor conditions by increasing the pay in the contracts on the basis of \$22-\$28 per week. The storage rate also has been increased to \$1.50 per 100 cu. ft., and Mr. Neal predicted that it would be increased again if conditions warrant. An increase of rates on goods already in storage, it was pointed out, is provided for by the terms of the storage contract, which fixes the rate only for thirty days.

Determines Labor Charge

"Assuming that all warehousemen should make a 'labor in' and 'labor out' charge, on what basis should such a charge be made?" was discussed briefly, and it was decided that the "labor in" charge should be equal to one-half of the first month's storage, a similar charge being made for "labor out."

L. H. Tanner, of the Central Storage Co., Detroit, read a paper on "A Warehouseman's Greatest Asset, and How to Retain It." A satisfied customer, Mr. Tanner declared, is the greatest asset. To make satisfied customers under present conditions, three suggestions were offered:

"We must protect our help and keep them satisfied; we must endeavor in every way to satisfy our customers and retain their good will; we must look to the future and

plan to protect our help after the war is over."

The question of warehouse accounting, covered in a paper read by William T. Bostwick, of the Thomas J. Stewart Co., Jersey City, N. J., developed an interesting discussion as to uniform business systems and standardized accounts in warehouses. James F. Keenan, of the Haugh & Keenan Storage & Transfer Co., of Pittsburgh, re-introduced the question of the employment by the association of an expert systematizer to effect the necessary standardization. This question has been frequently considered by the association.

Expert Is Needed

"We should employ such an expert," declared Mr. Keenan. "He should standardize methods, audit accounts and fix charges for members at their request. It might be possible to get the right man for \$5,000 or \$6,000 a year. We need systems to fit the little man as well as the big man, not one system for all, but standardized methods for all."

On the motion of W. Lee Cotter, Cotter Transfer & Storage Co., Mansfield, Ohio, President Bateman was empowered to appoint a committee to make the necessary preliminary arrangements for the hiring of an expert, and also to find a man qualified to serve in that capacity. The personnel of the committee is to be announced later.

A novel system of paying bonuses to employees was explained by H. O. Dannenberg, United Storage Co., Milwaukee. The plan in effect in the United company provides on the basis of a \$20-a-week employee the payment of \$18 a week salary. The \$2 deducted each week is held by the company for a period of six months, at the

end of which time the employee receives the total plus \$1 a week for each week he worked during the period. The company's system of bonuses for van drivers is based on efficiency.

L. L. Firuski, of the Pioneer Fireproof Storage Warehouses, Brooklyn, N. Y., contributed a paper entitled, "Which? Profit or Loss?" which was read by Secretary Wood in the absence of the writer. In establishing storage rates, Mr. Firuski contended that the following items should be taken into consideration:

Wasted areas in warehouses created by elevator shafts, aisles, etc.; overhead waste space in piano and automobile storage rooms and the cost of getting for delivery "the last piano or the last automobile in the last row"; loss of earning power of the room devoted to the storage of materials, machinery for running the plant, and repair room; loss of time of men caused by failure to find people home, slow workers, wasteful workers, or sleepers on long distance jobs; wear and tear on plant and equipment; expense of outstanding accounts.

Many Papers Presented

Other papers were, "The Dignity of Moving," by David Bowes, of the Judson Freight Forwarding Co., Chicago, "Creating a Demand for Storage," by T. W. Dana, of the Dana Fireproof Warehouses, Chicago, and "Everybody Has a Hobby. What is Yours?" by Newton R. Frost, of the Ballard Fireproof Storage & Transfer Co., St. Paul, Minn. Grover McHugh and C. A. Ward, of the Electrical & Specialty Supply Co., Chicago, spoke briefly on carpet cleaning as a branch of the warehouse business. At the closing session Tuesday morning,

June 25, a telegram of greeting was sent by the members to Martin H. Kennelly, a former treasurer of the association, and now a lieutenant in the Quartermaster's Department at Washington.

Entertainment Program

The entertainment program, which took up the first two days of the gathering, was in charge of a committee consisting of six members.

The members gathered at the Hotel LaSalle in Chicago on Thursday, June 20, and on Friday morning at 9:30 o'clock left on a special electric train over the Chicago, North Shore & Milwaukee Railway for Milwaukee, where lunch was served at the Wisconsin Hotel at noon. At 1:30 the trip was continued, and the party reached Elkhart Lake at 6 p. m. At 8:30 p. m. in the Hotel Schwartz Casino a musical revue was presented by a company of entertainers. This was followed by dancing.

On Saturday morning the golfers of the association played a handicap tournament at the Sheboygan Country Club, and in the afternoon the annual baseball game of the association was played at Plymouth. On Saturday evening in the hotel Casino there was an indoor circus, with Secretary Wood as ringmaster and various talented members as lions, giraffes, clowns, etc., and a number of professionals. Golf finals were played Sunday morning, and in the afternoon the members took a boat trip around Elkhart Lake. On Sunday evening the motion pictures of last year's convention were shown, and this was followed by an amateur vaudeville show in the Casino. The annual banquet Monday night, at which the Red Cross drive was launched, concluded the entertainments.

News of the Transfer and Storage Industry

Buffalo Trucking Association, Buffalo, N. Y., elected the following members to office at its annual meeting held the latter part of May: James C. Snyder, president; Chas. E. Adamy, vice-president, and John E. Goress, secretary.

P. C. Huddleston, Brea, Cal., has sold a half interest in his transfer and storage business to C. H. Fletcher, of Pasadena, and the firm is now known as the Brea Transfer Co.

Gustav A. Olson & Co., Inc., Brooklyn, N. Y., has been chartered to carry on a general trucking and storage business. The capital is \$10,000, and the directors are Gustav A. Olson, John B. Almquist and Carl G. Almquist, all of Brooklyn.

Mae Christian, Biwabik, Minn., who has conducted a draying business for the last two years, has given up using horses for cartage, and from now on will use auto trucks only.

George Hammalin, Hollister, Cal., a pioneer in the draying and cartage business of that city, died at the Hollister County Hospital on June 11 from the infirmities of old age. Mr. Hammalin was one of the best-known cartage men in that part of the country.

Turner Transfer & Storage Co., Beaver, Colo., has begun work on the remodeling of its building. About 75 per cent of its building will be used for general storage. This is an increase of very near double the company's present storage space. The company is also erecting a large garage for automobile storage.

M. P. Freeman, Phoenix, Ariz., a transferman of that city for several years, has opened a new automobile service station. The building is constructed of concrete and is built along similar lines to those found in Phoenix. Gasoline, oil and accessories will be handled. The building is one of the most modern in the State of Arizona.

Long Island Storage Warehouses, Brooklyn, New York, has recently had a booklet printed showing the best automobile routes in the states of New York, New Jersey, Pennsylvania and the Southern New England states for the benefit of the transfer and storage men operating trucks overland.

I. H. Nakimen, Fort Smith, Ark., president of the City National Bank, has purchased the warehouse and elevator of the Hayes Grain Co. The tract is composed of two acres, and the warehouse and elevator covers most of this site. The purchase price is given at \$25,000.

Utah Storage & Warehouse Co., Ogden, Utah, has been making extensive improvements in its warehouse located at East Wall Street. The improvements when finished will increase the floor capacity of the company over 20,000 square feet, making a total of 45,000 feet available for storage. The company is also installing an automatic fire sprinkler system in its warehouse.

Shippers' Index

A Guide to representative
Storage and Transfer Companies
arranged by States and Towns

Return Loads Bureaus

A LIST of organized centers through which van and truck owners may arrange for return loads. Application for such should be made as far in advance as possible and in some cases a charge is made for the maintenance of the bureau.

Connecticut

Bridgeport Chamber of Commerce
Bristol Chamber of Commerce
Danbury War Bureau or C. of C.
Greenwich War Bureau
Hartford Chamber of Commerce
Manchester War Bureau
Meriden Chamber of Commerce
Middletown War Bureau
New Britain Chamber of Commerce
New Haven War Bureau
New London War Bureau
Norwalk War Bureau
Norwich Chamber of Commerce
Stamford Chamber of Commerce
Waterbury War Bureau

District of Columbia

Washington Chamber of Commerce

Michigan

Detroit Chamber of Commerce

New Jersey

Asbury Park Board of Commissioners
Carney State Council of Defense
Dover Chamber of Commerce
Garfield Police Station
Jersey City Chamber of Commerce
Newark Motor Truck Club of N. J.
New Brunswick Home Defense League
Millville Maurice River Transportation Co.
Montclair Police Department
Trenton Chamber of Commerce

New York

Albany Chamber of Commerce
Buffalo Chamber of Commerce

Buffalo J. E. Pugh
New York Merchants' Association
New York Van Owners' Association
Rochester Chamber of Commerce
Syracuse Chamber of Commerce

Ohio

Cleveland Chamber of Commerce
Cincinnati Chamber of Commerce

Pennsylvania

Philadelphia Chamber of Commerce

The Team Owners' Protective Association of Philadelphia, Pa., has adopted a plan to relieve the congestion of freight at terminals and piers. The plan is as follows:

The consignee is notified in the regular way of an arrival of goods, but if the goods are not removed within the specified time allowed, the railroads make up a list of whatever freight is blocking the terminals, and this is sent to the President of the Team Owners. This list also tells where the goods are located and what warehouse they are to be sent to. The president then assigns the team owners who are doing this work to the various terminals with the instructions given to him by the railroads. The next morning the team owners remove the freight from the terminals to the warehouses.

There are at present eight team owners who have turned all of their equipment over to this work, but any member of the association who furnishes a bond is eligible to do this class of work. The system has been very successful in clearing the Philadelphia terminals of freight.

BIRMINGHAM, ALA.**HARRIS TRANSFER
AND WAREHOUSE COMPANY**

(Equipped to Handle Anything)

MODERN FIREPROOF WAREHOUSE

Special Attention Given to Packing and Shipping

When shipping to Birmingham, consign goods to Harris
—he will look after your interests, also those
of your customer

Offices: CHAMBER OF COMMERCE BLDG.

LITTLE ROCK, ARK.**WAREHOUSING
AND FORWARDING**Distributors of Pool Cars, Parcel Post Catalogs and
Merchandise**TERMINAL
WAREHOUSE COMPANY**

109 - 111 RECTOR AVENUE

All track connection

BERKELEY, CAL.**STUDENTS
EXPRESS & TRANSFER CO.**MOVING
STORING
FORWARDING

2132 SHATTUCK AVENUE

YOUR ADVERTISEMENT
IN THE**Shippers' Index
Section**IS READ BY THE PEOPLE
YOU MOST DESIRE TO
GET IN TOUCH
WITH

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

LOS ANGELES, CAL.**Shattuck & Nimmo
WAREHOUSE CO.****MOVING, STORING, PACKING
SHIPPING**MERCHANDISE DISTRIBUTION
FROM OUR OWN SPUR TRACKSMANUFACTURERS consolidating carloads
for Southern California distribution are assured
of efficient and prompt service by consigning
them in our care. Rates on request.WAREHOUSEMEN, consign your household
goods shipments to us for prompt distribution
and quick returns.

MEMBERS OF

Pacific Coast Furniture Warehousemen's Association, American
Chain of Warehouses, National Distributing Division,
Local Rotary Club and Chamber of Commerce**DENVER, COLO.****THE WEICKER
TRANSFER & STORAGE COMPANY**

Office, 1017 Seventeenth Street

New Fireproof Warehouse on Track

Storage of Merchandise and Household Goods
Distribution of Car Lots a SpecialtyEvery Facility for Handling Safes, Boilers and Heavy Machinery
Complete Fleet of Motor Trucks and Modern EquipmentMembers { American Warehousemen's Association
Illinois Furniture Warehousemen's Association
New York Furniture Warehousemen's Association
Pacific Coast Furniture Warehousemen's Association
Central Warehousemen's Club
American Chain of Warehouses**HARTFORD, CONN.****THE
BILL BROTHERS COMPANY**

TRANSFER AND STORAGE

Special Facilities for Moving Machinery, Safes, Furniture, Pianos,
etc. STORAGE WAREHOUSES with separate apartments for
Household Goods and Railroad Siding for Carload Shipments.**NEW LONDON, CONN.****B. B. Gardner Storage Co., Inc.**
18 BLACKHALL STREET
PIANO AND FURNITURE PACKER, MOVER
AND SHIPPER

Safe Mover—Freight and Baggage Transfer—STORAGE

ATLANTA, GA.

CATHCART**TRANSFER & STORAGE COMPANY**

Moves, Stores, Packs, Ships
Household Goods Exclusively

Office and Warehouse, 6-8 MADISON AVE.

ATLANTA, GA.

WAREHOUSEMEN

MORROW**TRANSFER & STORAGE COMPANY**

HOUSEHOLD GOODS
Moved, Stored, Packed, Forwarded—Excellent Facilities
SERVICE Our Boasted Pride

182-184 MARIETTA STREET

BOISE, IDAHO

PEASLEY**TRANSFER & STORAGE COMPANY**

STORAGE, TRANSFER AND FORWARDING

NINTH AND GROVE STREETS,

CHICAGO, ILL.

BEKINS**HOUSEHOLD SHIPPING COMPANY**

Reduced Rates on Household Goods, Automobiles
and Machinery

General Offices, 805 BEDFORD BLDG., Chicago
NEW YORK, BOSTON, BUFFALO, CINCINNATI

CHICAGO, ILL.

*The Sign
That Brings You
Business*

ARE YOU **LEAVING CHICAGO?**

PACKING AND
SHIPPING HOUSEHOLD GOODS
OUR SPECIALTY

THE CENTRAL CO.

736-740 FIRST NATIONAL BANK BLDG

OVER 2½ MILLION POUNDS
SHIPPED JAN. 1 TO JULY 31, 1917

*Send Us Your Chicago Business
We Will Send You Ours*

MOTOR TRUCKS

Centrally Located
Near All Railroads

CHICAGO, ILL.

FORT DEARBORN**FIREPROOF STORAGE COMPANY**

4165-29 Clifton Ave., near Broadway and Wilson.

Fireproof
Storage.

Motor-
Van
Service.



Pool Car
Handling
a
Specialty

The only warehouse located on the Great North Shore with private railroad switch track at its door, serving efficiently *Edge-water, Ravenswood, Sheridan Park, Rogers Park, Evanston* and the *Wilson Ave.* district.

Consignments from all railroads bill to Wilson Ave. Switch C. M. & St. P. Ry.

FORT WAYNE, IND.

BROWN TRUCKING COMPANY

MOVING, DISTRIBUTING, STORAGE AND
GENERAL TRANSFER—MOTOR SERVICE

Pool Cars a Specialty

Office, 125 W. Columbia Street

FORT WAYNE, IND.

PETTIT'S**STORAGE WAREHOUSE COMPANY**

414 E. COLUMBIA STREET

W. L. Pettit, Jr., Pres. (Est. 1910) E. K. Pettit, Sec.
Transfer and Storage of Household Goods, Merchandise, New Autos,
Implements. Heavy Haulage. Motor Service. Safe Deposit Vaults.

FACTORY DISTRIBUTORS

**We do *not* run a
Return Loads Bureau**

but we may be able to help
you get a return load if you
let us know in time. If we
can do so, the pleasure of
service is our reward.

TRANSFER & STORAGE
New York

INDIANAPOLIS, IND.

We Have the Very Best of Equipment for Handling
Heavy Machinery, Boilers, Engines, Tanks,
Vaults and Safes for Erecting Smoke Stacks



INVESTMENT \$200,000.00

We have just completed one of the most modern fireproof
warehouses in the country—centrally located on a privately
owned railroad switch accommodating eight cars.

We are equipped to give the very best service in all kinds of
moving and packing. All shipments consigned to our care will
receive prompt attention and our twenty-five years' experience
and reliability insures this service.

HOGAN TRANSFER & STORAGE CO.

Members
N. F. W. A. and I. F. W. A.

Established
1892

BALTIMORE, MD.

SECURITY STORAGE & TRUST COMPANY

15 W. North Avenue

FIREPROOF WAREHOUSES

MOTOR EQUIPMENT

EFFICIENT SERVICE
TO WAREHOUSEMEN

Members of
New York, Illinois and American Warehousemen's Associations

BOSTON, MASS.

Established 1880

T. G. BUCKLEY CO.

MOVERS OF HOUSEHOLD GOODS AND PIANOS
MOTOR TRUCK SERVICE

REINFORCED CONCRETE WAREHOUSE

OFFICE and WAREHOUSE, 690 DUDLEY STREET

Members N. Y. F. W. A.

LEOMINSTER, MASS.

W. K. MORSE

LIGHT AND HEAVY TRUCKING OF ALL KINDS

Office and Stables, Rear 83 Mechanic Street

Residence, 147 Whitney Street

DES MOINES, IOWA

MERCHANTS TRANSFER & STORAGE COMPANY

WAREHOUSEMEN AND FORWARDERS

General Offices, 9th and Mulberry Streets

PORTLAND, ME.

CHASE TRANSFER COMPANY

GENERAL FORWARDING AGENTS

Eastern Steamship Company, Maine Steamship Company
Grand Trunk Railway

Special Attention to Carload Consignment

SPRINGFIELD, MASS.

Central Storage Warehouse

STORAGE AND DISTRIBUTING
PACKING, CARTING, SHIPPING

WAREHOUSES, 270 LIBERTY STREET

MINNEAPOLIS, MINN.

CAMERON TRANSFER & STORAGE COMPANY

Unsurpassed facilities for Storing, Handling, Transferring and
Forwarding Merchandise and Household Goods
FIREPROOF STORAGE

420 SECOND AVENUE SOUTH

BALTIMORE, MD.

Your Advertisement In This Space

will be read not only by ware-
house and transfer men ship-
ping to your neighborhood but
by many national manufacturers
looking for distributing facilities

KANSAS CITY, MO.

Are You Giving Your Customers Service?

The present congested conditions of our railroads and slow movement of less than carload freight, and the possibility of embargoes on many commodities, make it more imperative than ever that you carry suitable stocks of your goods at important Western distributing centers to properly take care of your trade in that territory.

We invite you to make use of our warehouse as a branch of your own establishment for this purpose. Our building is of modern fireproof construction and equipment—automatic sprinkler system—low insurance rates—free switching of carloads. Ample teaming equipment and twenty years of knowing how, insures prompt, efficient and satisfactory service.

D. A. MORR

TRANSFER & STORAGE COMPANY

Members { Central Warehousemen's Club
American Chain of Warehouses
American Warehousemen's Association
Illinois Furniture Warehousemen's Association
New York Furniture Warehousemen's Association

Please mention this paper

OMAHA, NEBR.

Gordon Fireproof Warehouse & Van Co.

Main Office: 219 NORTH 11th STREET

Six warehouses covering over one city block. 200,000 square feet of floor space. Four warehouses equipped with automatic sprinkler systems.

Warehouses served by private tracks on the C. B. & Q. and the C. & N. W. (joint track); and the Illinois Central. All roads absorb switching charges.

Accommodations for brokers, jobbers, automobile manufacturers and dealers.

Household Goods Packed, Stored and Forwarded

MOVING — TRANSFER — FORWARDING

MEMBER { New York Furniture Warehousemen's Association.
Illinois Furniture Warehousemen's Association.
Central Warehousemen's Club.
Pacific Coast Furniture Warehousemen's Association.

ST. LOUIS, MO.

Columbia Transfer Company

Special attention given to the distribution of carload freight

Depots: St. Louis, Mo., and East St. Louis, Ill.

On the first page of this section (page 39)

will be found a list of such Return Loads Bureaus as have been reported as established. We will run this list regularly, extending and correcting it from month to month as may be necessary.

OMAHA, NEBR.

THE "CITY OF OPPORTUNITY"

Represented by the

Pacific Storage & Warehouse Co.

1007-9-11 JONES STREET

We have studied the problems of the national distributor of manufactured articles and merchandise and have both the experience and facilities to care for business of this kind in a way that will satisfy the most critical.

Write us about the goods you have to be distributed in this territory and we shall be glad to quote prices for delivery, storage or reshipping.

**MOTOR TRUCK SERVICE — 75,000
SQUARE FEET OF STORAGE SPACE**

Members of the Central Warehousemen's Club

CAMDEN, N. J.

Established 1903

Troth's Model Warehouses

5th and Byron Streets

MANUFACTURERS' DISTRIBUTORSCorrespondence Solicited
Direct Delivery Service Throughout Philadelphia**HOBOKEN, N. J.****FREIGHT STORAGE**

5 BLOCKS FROM D. L. & W. FERRIES

**LOW INSURANCE
RATES ON REQUEST****HUDSON STORES, INC.**

Office and Warehouse:

Ferry Street and Park Avenue, Hoboken, N. J.

Phones—Hoboken 1810-1811-1812

JERSEY CITY, N. J.**STORAGE WAREHOUSE**PENN R. R. SIDING
INITIAL CARTAGE ELIMINATED BY SIDING
LOW INSURANCE CARLOAD DISTRIBUTION
RATES ON REQUEST**HUDSON
WAREHOUSE & DISTRIBUTING CO.**Phones—Hoboken 1810-11-12
Ferry St. and Park Ave., Hoboken, N. J.**WAREHOUSE**
108-114 Academy St., Jersey City**ALBANY, N. Y.****SECURITY****STORAGE & WAREHOUSE CO., INC.**

1 DEAN STREET

Storage, Transferring and Forwarding
Direct Track Facilities Pool Car Distribution**BINGHAMTON, N. Y.****MOLLEN****TRANSFER & STORAGE COMPANY**Unsurpassed facilities for storing, handling, transferring and forwarding merchandise and household goods.
Correspondence solicited.

Main Office, Erie Depot. Warehouse, 13-15 Warren St.

BINGHAMTON, N. Y.

Member Chamber of Commerce

JOHN B. SOUTHEESTORAGE WAREHOUSE AND VAN OFFICE
MOVING AND TRUCKING OF ALL KINDS
178 STATE STREETOffice Phone 1366
House Phone 1799Residence,
60 Moeller St.**BROOKLYN, N. Y.**Cable Address, *Jenkinlis*
Western UnionLong Distance Phones
3100-3101-3102 Bedford**ABSOLUTELY FIREPROOF****Long Island Storage Warehouses**

Nostrand and Gates Avenues

BRANCH WAREHOUSES

881-891 Park Avenue 781-789 Kent Avenue

To save delay in consignments for delivery to any part of New York City or Brooklyn, mark goods in our care to "Eastern District Terminal, Brooklyn." This is the center of Greater New York—no delay due to congestion.

Try shipping this way. We know**BUFFALO, N. Y.****WE WILL LOOK AFTER YOUR INTEREST,
ALSO THAT OF YOUR CUSTOMERS****O**UR large, specially-built, six-story household goods warehouse is one of the finest between New York and Chicago. (Capacity 1000 van loads.) With our corps of expert workmen and unequalled facilities, we can render prompt and efficient service to your Buffalo patrons.**Furniture Stored, Packed or Shipped
to Any Part of the World**

Convenient to the railroad switches Motor Trucks for Prompt Delivery Low Insurance Rates Fireproof Vaults

COLD SPRING STORAGE COMPANY
1432-1442 Main StreetJ. W. POWELL, President and General Manager
Members of Buffalo Chamber of Commerce, Illinois Furniture Warehousemen's Ass'n, New York Furniture Warehousemen's Ass'n.

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

BUFFALO, N. Y.

BUFFALO
STORAGE & CARTING COMPANY
 STORAGE, TRANSFER AND
 FORWARDING
 Warehouse on New York Central Tracks

BUFFALO, N. Y.

O. J. GLENN & SON
 Everything in the Line of Moving,
 Carting, Packing, Storage
 OFFICE: 47 WEST SWAN STREET

NEW YORK, N. Y.

MERCHANDISE SHIPMENTS

for upper east side promptly
 and efficiently handled through
 our special facilities.

Large merchandise warehouse,
 31,500 square feet for storage of
 shipments in car load lots. We
 act as distributing agents.

Transfer and trucking service.

Ship via Pennsylvania R. R.;
 Lehigh Valley; New York Cen-
 tral; Baltimore & Ohio; Erie
 R. R.; Lackawanna R. R.; New
 York, New Haven & Hartford;
 Central R. R. of New Jersey.

H. D. BAHR TRUCKING CO.
 280-287 East 137th Street

NEW YORK, N. Y.

Julius Kindermann & Sons

Three large fireproof storage warehouses adjacent
 to Washington Heights and all counties
 in Westchester section

1360-62 Webster Avenue, near 170th Street, Bronx

NEW YORK, N. Y.

LONG ACRE
EXPRESS & STORAGE WAREHOUSE
 410 WEST 47th STREET

Moving, Packing and Shipping. Motor Vans for Long Distance
 Edward Keevan, Prop. Telephone, Bryant 2296

Member of N. Y. F. W. A. and N. T. and M. T. O. A.

NEW YORK, N. Y.

Metropolitan

Fireproof Storage Warehouse Co.
 14-39-41 WEST SIXTY-SIXTH STREET
 Near Central Park

CHARLES S. MORRIS, Pres. and Treas.
 LAWRENCE S. MORRIS, Sec'y and Gen. Manager

We Bid for Your Business on a Basis of
 Service—"We Know How"

TWO FIREPROOF BUILDINGS
MOTOR OR HORSE-DRAWN VANS
AN EFFICIENT PACKING FORCE

Adjacent to all Freight Terminals

ESTABLISHED 1875
 "That means something"

Members of New York Furniture Warehousemen's Ass'n.
 Illinois Furniture Warehousemen's Ass'n.
 Southern Furniture Warehousemen's Ass'n.
 Van Owners' Ass'n of Greater N. Y.
 New Jersey Warehouse & Van Owners' Ass'n.



NEW YORK, N. Y.



MORGAN & BROTHER
 Storage Warehouses
 and Motor Vans

MOVING STORAGE PACKING

Our reputation in handling collections on consign-
 ments is your guarantee in selecting us as your
 correspondent in New York City

*Furniture and Works of Art Boxed
 and Shipped to all Parts of the World*

230-232-234-236 WEST 47th STREET
 TELEPHONE 52 BRYANT Near Broadway

Cable Address: MORGANWARE

Members:

New York Furniture Warehousemen's Association
 Illinois Furniture Warehousemen's Association
 Van Owner's Association of Greater New York

NEW YORK, N. Y.

"EXPERT SERVICE PAYS"

MOVING PACKING
SHIPPINGVAULTS for STORING PACKAGES
of SILVER PLATE and VALUABLESOur central location and modern equipment
enable us to offer you an unusually efficient
service for your New York consignments.Members of New York Furniture Warehousemen's Association
Illinois Furniture Warehousemen's Association

THE WEST END STORAGE WAREHOUSE

Ben Blumenthal, Proprietor Grant Wayne, Manager
Louis J. Crumm, Supt.

202-210 West 89th Street

Consign all C. L. & L. C. L. Ship-
ments for Delivery to Warehouse

B. & O. R. R.—135th St. and
Harlem River Station
C. R. R. of N. J.—132d St. and
S. Boulevard Station
D. L. & W. R. R.—135th St.
and Harlem River Station
Erie R. R.—135th St. and Har-
lem River Station
Lehigh Valley R. R.—E. 124th
Street Station
L. I. R. R.—Harlem and Mor-
risania Station
N. Y. C. & H. R. R. R.—130th
Street Station
N. Y. N. H. & H. R. R.—Har-
lem River Station
Penn. R. R.—E. 125th Street
Station
West Shore R. R.—130th Street
Station

ROCHESTER, N. Y.

JOSEPH A. SCHANTZ
COMPANY

173-219 CENTRAL AVENUE



We have every facility for handling your Rochester shipments

Two Fireproof Warehouses
Two Non-fireproof Warehouses
Large Fleet of Modern Motor VansBy mailing your Rochester bills of lading to us you are
guaranteeing the most prompt and courteous service to
your patrons. You are also protecting your own in-
terests, because we will return all collections promptly
and watch the details carefully.

Member of New York Furniture Warehousemen's Ass'n.

NIAGARA FALLS, N. Y.

WILLIAM YOUNG

TRANSFER AND STORAGE OF
HOUSEHOLD GOODS

MACHINERY AND SAFE MOVING A SPECIALTY

"Unexcelled SERVICE"

SYRACUSE, N. Y.

Pres., Lewis Sheridan Sec., W. F. Engle
Treasurer, Robert Flagg

Flagg Storage Warehouse Co.

Forwarders and Shippers' Agents.
Largest Fireproof Warehouse in Central New York.
Always ready to store or ship anything anywhere.
Good Railroad Center and Distributing Point.
Growing to meet the Needs of Conservative Shippers.
Storage of All Kinds of Merchandise.

Pool car distribution our specialty. We can offer all facilities of Branch House service.
Track connection with New York Central and West Shore Railroads.

ROCHESTER, N. Y.

Blanchard Storage Co., Inc.

Allen and N. Washington Streets

Arthur S. Blanchard, President and Treasurer

Storage
Moving

HOUSEHOLD GOODS

Rochester "Chief" Rug and Carpet Cleaners

Packing
Shipping

Members New York and Illinois Furniture Warehousemen's Association

ROCHESTER, N. Y.

ROCHESTER CARTING CO.

Members New York Warehousemen's Association
Distributors of Car Load Freight

Unsurpassed facilities for Storing, Transferring and Forwarding
Merchandise and Household Goods
Two Large Storage Warehouses

162-164 ANDREWS STREET

UTICA, N. Y.

UTICA

CARTING & STORAGE COMPANY

Storage, Trucking, Forwarding,
Shipping, Rigging, Transferring,
Distributing, Checking, Packing

MOTOR VANS FOR LONG DISTANCE

Members New York and Illinois Associations.

If the City to which you are shipping
is not represented in this list, choose
the nearest as the geographical
arrangement will help you.

Notice this section grow.

This means that shippers find it useful.

This usefulness will increase with every edition.

AKRON, OHIO

**THE UNION
FIREPROOF WAREHOUSE CO.**

FURNITURE AND MERCHANDISE
STORAGE

THREE FIREPROOF WAREHOUSES

THE COTTER SYSTEM

Members New York, Illinois and American Warehousemen's Assns.

CANTON, OHIO

CUMMINS STORAGE COMPANY

STORAGE, DRAYING, PACKING AND
FREIGHT HANDLING A SPECIALTY

Unsurpassed Facilities for Handling Pool Cars

310 EAST NINTH STREET

CINCINNATI, OHIO

"STACEY FIRST"



SERVICE
FIREPROOF AND NON-FIRE-
PROOF WAREHOUSES

MODERN MOTOR
VAN EQUIPMENT

RELIABILITY

Established 1891 Investment \$250,000
Your interests carefully protected

STACEY AUCTION & STORAGE CO.
2333 Gilbert Avenue

CLEVELAND, OHIO

SERVICE IS THE THING

For You and Your CLEVELAND Customers

**LET US SERVE THEM AS
THEY SHOULD BE SERVED**

Our Equipment—Fireproof and
Non-Fireproof Storage. Motors
and Horse-Drawn Vans.

Our Organization is complete and
is more than ample for the largest
and most difficult proposition.

We Conserve Your Interests

**THE CENTRAL STORAGE
WAREHOUSE CO.**

1843 East 55th Street

5601 Hough Avenue

CLEVELAND, OHIO

**NEAL
FIREPROOF STORAGE COMPANY**

7208-16 EUCLID AVENUE

Modern Fireproof Buildings

Carload Consignments Solicited

CLEVELAND, OHIO

**THE
REDHEAD STORAGE CO.**

2041 E. 105th STREET

MOTOR VAN SERVICE

Fireproof Warehouse
Household Consignments Solicited
Satisfactory Service Assured

Members I. F. W. A.

COLUMBUS, OHIO

THERE IS
NOTHING TOO LARGE
NOR TOO SMALL
FOR US TO HANDLE

**THE BUCKEYE
TRANSFER & STORAGE COMPANY**

CLEVELAND, OHIO

**THE LINCOLN
FIREPROOF STORAGE COMPANY**

5700 EUCLID AVENUE

CONSIGNMENTS SOLICITED
PACKING—MOVING—STORAGE

DAYTON, OHIO

THE LINCOLN STORAGE CO.

"Fireproof"

BIG 4 TRACK IN BUILDING.

Members N. Y. & I. F. W. A.

313-315 EAST FIRST STREET

A. B. Compton, Vice-President

MANSFIELD, OHIO

THE COTTER TRANSFER AND STORAGE CO.

FIREPROOF AND NON-FIREPROOF
WAREHOUSES

Furniture and Merchandise Storage

Motor Trucks Heavy Hauling Distributing

The Cotter System

Members New York, Illinois and American Warehousemen's Assns.

SPRINGFIELD, OHIO

Bill All Shipments for Springfield, Ohio, to

WAGNER FIREPROOF STORAGE & TRUCK CO.

Siding on Pennsylvania Lines

Complete Facilities for Distribution of Pool Car Shipments
Moving—Packing—Shipping—Storing
Household Goods and Merchandise

TOLEDO, OHIO

DEPENTHAL TRUCK & STORAGE COMPANY

108 SUMMIT STREET

Member of New York, Illinois, and Southern Furniture
Warehousemen's Associations

TOLEDO, OHIO

THE TOLEDO MERCHANTS' DELIVERY COMPANY

128 SUMMIT STREET

AUTO SERVICE—FIREPROOF STORAGE

Household Goods and Automobiles Moved, Packed, Shipped and
Stored. Safes, Boilers, Machinery and Smokestacks Moved.

100% SERVICE

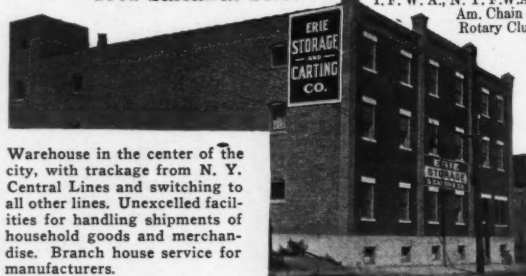
Reference: Second National Bank, or any bank in Toledo

ERIE, PA.

ERIE STORAGE & CARTING COMPANY

1502 Sassafras Street

Members of A. W. A.,
I. F. W. A., N. Y. F. W. A.,
Am. Chain &
Rotary Club



Warehouse in the center of the
city, with trackage from N. Y.
Central Lines and switching to
all other lines. Unexcelled facilities
for handling shipments of
household goods and merchandise.
Branch house service for
manufacturers.

OIL CITY, PA.

CARNAHAN TRANSFER & STORAGE COMPANY

R. C. LAY, Proprietor

Piano Moving a Specialty

Distributing and Forwarding Agents; Packing
Fireproof Warehouse

PHILADELPHIA, PA.

ATLAS

STORAGE WAREHOUSE

Office and Warehouse:
Market and Thirty-seventh
Streets,
Philadelphia, Pa.



Member Pennsylvania,
New York, Illinois,
and Southern Furniture
Warehousemen's Associations

Service is the measure of the difference between good
work and poor.

Service of the right sort in the storage, moving, packing
and shipping of household goods and office furnishings
exclusively, constitutes our business.

As it relates to shipments consigned to us, we interpret
service to require safeguarding the interests of the
shipping warehouse, prompt remittance of collections,
fair charges and treatment to customers, and to all—
courtesy.

We solicit your Philadelphia shipments.

For West Philadelphia and general city delivery consign
C. L. and L. C. L. shipments—P. R. R., 30th
and Market St. Station; B. & O. R. R., 24th and
Race St. Station; P. & R. Rwy., 23rd and Arch St.
Station.

PHILADELPHIA, PA.



Our large fleet of motor trucks enables us to render
quick and efficient service to your patrons.

We are accessible to all depots and suburbs of our
city. Our warehouses are within two blocks of North
Philadelphia Station of the Pennsylvania Railroad
and the 12th and York Streets Station of the Philadelphia
& Reading or the Baltimore & Ohio.

Collections through our office will assure prompt
returns.

Fireproof and Non-Fireproof Warehouses

Miller North Broad Storage Co.

2709-2721 North Broad Street

PHILADELPHIA, PA.

Penn Storage and Van Co.

2136 MARKET STREET

Who looks after YOUR interests, also those of your CUSTOMER, in PHILADELPHIA?

Good packing needs careful unpacking to insure a Satisfactory Removal.

"LET WIGHTMAN DO IT"

He's been doing it for over twenty-five years. Ship in our care as follows:

30th and Market St. Station
Pennsylvania R. R. Co.

23d and Arch Street Station
Philadelphia & Reading Ry.

24th and Race Street Station
Baltimore & Ohio R. R.

PHILADELPHIA, PA.



20th CENTURY

THE LAST WORD IN WAREHOUSES

A solid concrete building. Best location in Philadelphia. A fleet of Pierce Arrow enclosed vans. We operate a large garage adjoining our warehouse capable of accommodating the largest van built. Try us when your van is in Philadelphia. All collections through our office promptly remitted. Members New York Warehousemen's Association.

20th CENTURY STORAGE WAREHOUSE CO.

3120-22-24-26-28-30 MARKET STREET
(Opposite West Philadelphia Station P. R. R.)

PHILADELPHIA, PA.

OUR HOBBY

is the distribution of goods for
National Merchandisers

North Philadelphia Storage Co., Inc.
SHIBE BALL PARK

PITTSBURGH, PA.

We Serve Pittsburgh and Vicinity



Shipments consigned in our care are insured careful handling and personal attention.



Our experience of 28 years and constant growth coming with such a long period of activity, enables us to safeguard the joint interests of our correspondents and their customers.



We have trackage on Penn'a. Railroad (East Liberty Station) direct to warehouse; padded vans, both motor and horse drawn, thoroughly skilled workmen. 2,000,000 cubic feet of storage space.

ESTABLISHED 1889 : INCORPORATED 1898
CABLE ADDRESS: DON'TFORGETTOGETTHEMONEY

HAUGH & KEENAN
Storage and Transfer Company
Centre and Euclid Avenues

PITTSBURGH, PA.

HOEVELER WAREHOUSE COMPANY

MOVERS AND STORERS

750 MILLVALE AVENUE

PITTSBURGH, PA.

MURDOCH STORAGE & TRANSFER COMPANY

Successor to

W. A. HOEVELER STORAGE COMPANY

General Office and Warehouses

546 NEVILLE STREET

PITTSBURGH, PA.

WEBER
EXPRESS & STORAGE COMPANY
 GENERAL HAULING
 Moving, Packing and Storing of Furniture and Pianos
 4620 HENRY STREET

HOUSTON, TEXAS

WESTHEIMER
WAREHOUSE COMPANY
 STORAGE AND DISTRIBUTING
 Fireproof Warehouses Separate Locked Rooms

SCRANTON, PA.

"The World Moves—So Does Post"

R. F. POST
 ESTATE
 44 LACKAWANNA AVENUE
 Freight, Furniture, Pianos, Safes, Machinery, Boilers, Stacks, etc.
 DRAYMAN, RIGGER, AND WAREHOUSE

SALT LAKE CITY, UTAH

Members American Warehousemen's Ass'n
 Central Warehousemen's Club

JENNINGS HANNA
WAREHOUSE COMPANY
 Railroad trackage all lines. General Merchandise storage. Merchandise distributors. A branch house without the expense of one. Insurance rate only 18 cents, which shows class of building we own, with paid-up capital of \$150,000.00. 100,000 sq. ft. of floor space. Write for rates and list of references

EL PASO, TEXAS

WESTERN
TRANSFER & STORAGE COMPANY
 220-26 S. STANTON STREET
 ONLY FIREPROOF STORAGE IN EL PASO
 Forwarders and Distributors—Trucking of all kinds—Distribution
 Cars a specialty—Warehouse on Track

YAKIMA, WASH.

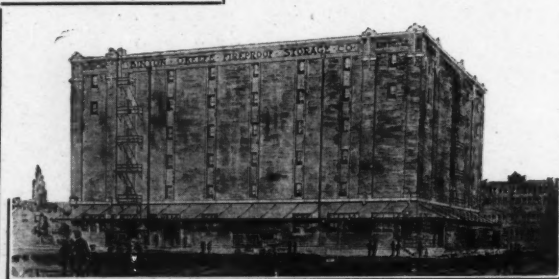
MILLER & LENINGTON
 CONTRACTORS
 DISTRIBUTING and FORWARDING AGENTS
 TRANSFER—STORAGE—WAREHOUSING

Motor Trucks and Team Equipment for All and Every Kind of Hauling

SHIP IN OUR CARE and let us be "At your service with best of service"

Office: 10 East A Street Sidney Hotel Bldg.
 'Phone 571

FORT WORTH, TEXAS



Binyon-O'Keefe
Fireproof Storage Company

Est. 1875

Your consignments to Fort Worth will receive intelligent service. We have a siding on the Rock Island Railroad with free switching from all lines. Fireproof warehouse, 90,000 sq. ft., yard storage, factory distributors.

Members of

Illinois Furniture Warehousemen's Association
 Southern Furniture Warehousemen's Association
 Central Warehousemen's Association

PARKERSBURG, W. VA.

PARKERSBURG
TRANSFER & STORAGE CO.

Distributing and Forwarding Agents Track in Building
 101-113 ANN STREET

Ask our Editors

If you need information relating to this field.

New equipment? new methods? facts or figures?

If we can serve you we'll be glad.



W. S. S. COST DURING 1918					
April	\$4.15	July	\$4.18	Oct.	\$4.21
May	4.16	Aug.	4.19	Nov.	4.22
June	4.17	Sept.	4.20	Dec.	4.23

W. S. S. WORTH \$5.00 JANUARY 1, 1923



TWENTY-TWO THOUSAND BUILDINGS for 750,000 men in 90 days! This record of construction in sixteen U. S. Army cantonments has never been equaled!

*"There is now a Fisk Tire
for every motor vehicle that rolls."*

MOTOR TRUCKS have brought isolated camp sites, munition cities and ship-building plants to within easy distance of vital supply bases. THEY have overcome almost insurmountable difficulties of transportation and prevented disastrous delays.

No TRUCK can be more dependable than its tires!

FISK SOLID TRUCK TIRES are rugged, dependable and built to wear—ready to go over the top in any service, at any time.

WHEN you need *dependable* solid tires—buy Fisk.

FISK SOLID TIRES

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

Sterling HEAVY DUTY TRUCKS

"Let's Talk Sterling"

Every prospective purchaser of heavy duty trucks should find it profitable to read "Let's Talk Sterling"—gives complete facts about Sterling heavy duty trucks with the wood-inlaid frame, of 2½, 3½, 5 and 7-ton capacities. Bodies for any requirement.

It goes into more important motor transport details, in a brief, simple way, than any book we have seen. You'll like its practical common sense.

Eleven years' experience has proved that the Sterling wood-inlaid frame means long life to the motor and power plant—minimum idle hours or days for repairing—and most satisfactory constant availability, always on the job, for service.

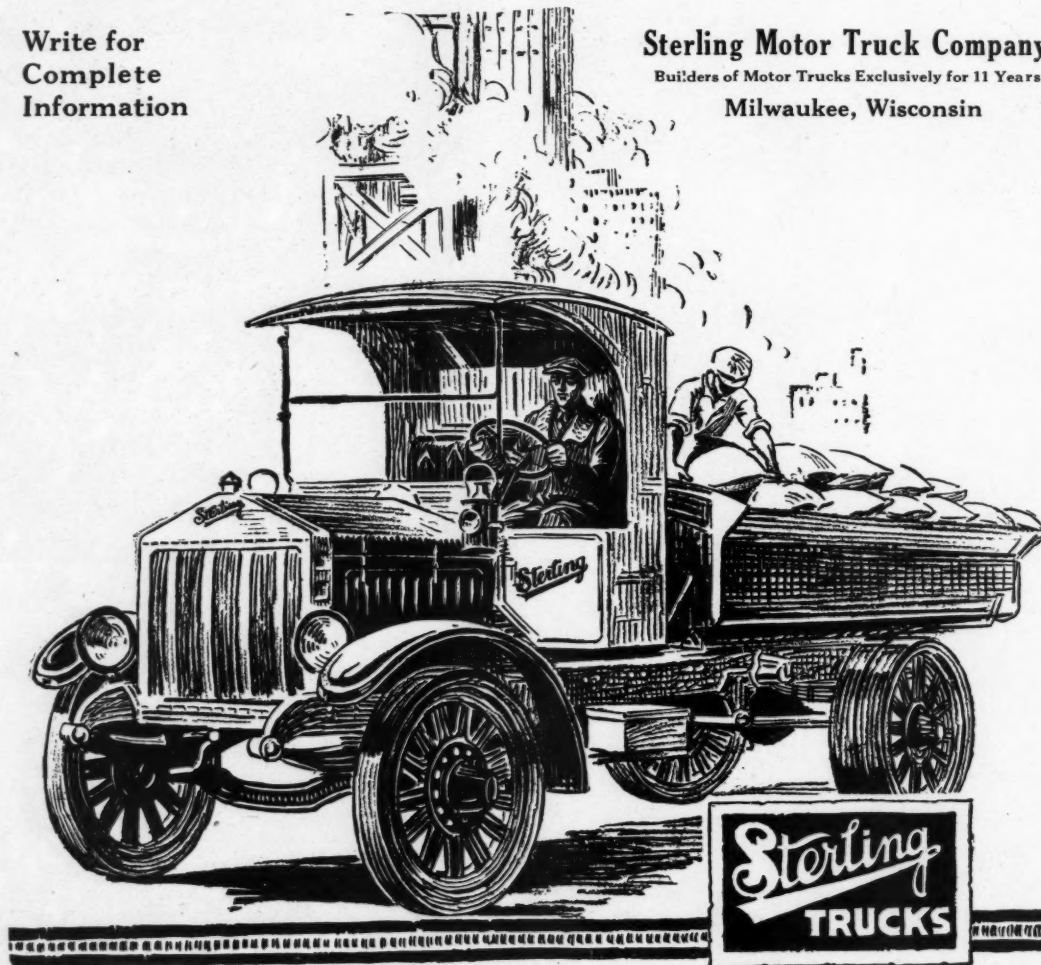
Our well equipped distributors and service stations in leading cities properly represent factory standards and established service policy.

**Write for
Complete
Information**

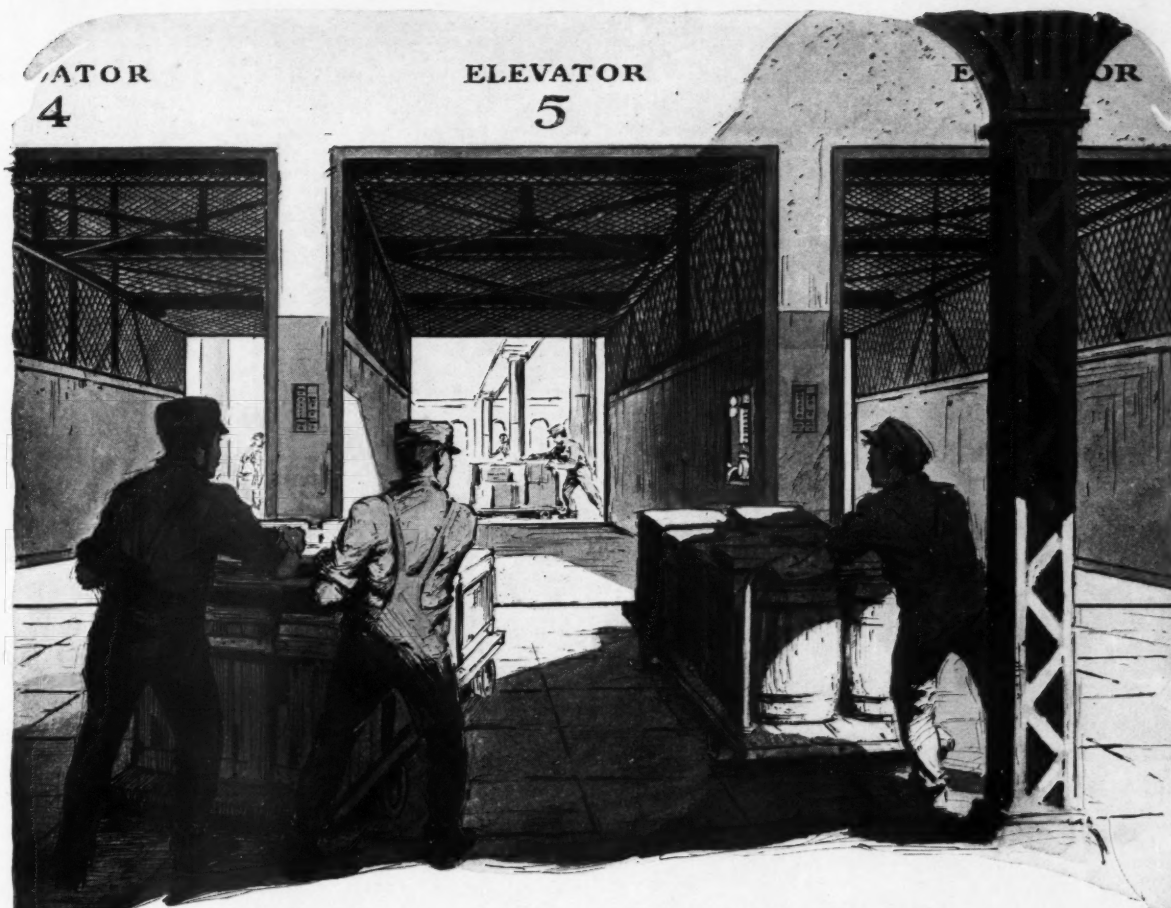
Sterling Motor Truck Company

Builders of Motor Trucks Exclusively for 11 Years

Milwaukee, Wisconsin



PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS



The Vertical Link in Your Freight Handling System

Industrial trucks have made rapid freight handling possible on the various floors of terminals and warehouses,—but the movement between floors, the vertical progress of the freight, continued to present a difficult problem until the introduction of the

Otis Operatorless Elevator

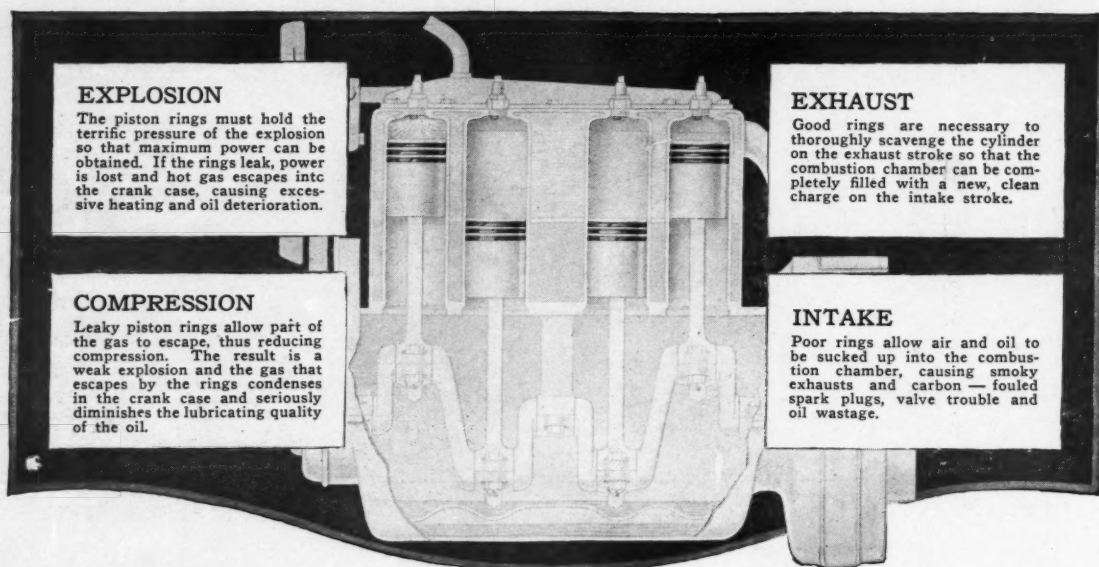
With this system the freight handler rolls his loaded trucks on the elevator and by pressing a button at the landing closes the door. By pressing another button the elevator with its load is dispatched to the desired floor where an automatic leveling device accurately registers the elevator platform with the landing—under all conditions of loading and unloading—and the doors are opened automatically. Simple, economical, safe, reliable.

If the vertical movement of freight enters into your plans in any way, you should investigate the possibilities of Otis Operatorless Elevators.

OTIS ELEVATOR COMPANY

ELEVENTH AVENUE AND TWENTY-SIXTH STREET NEW YORK

Offices in all principal cities of the world

**EXPLOSION**

The piston rings must hold the terrific pressure of the explosion so that maximum power can be obtained. If the rings leak, power is lost and hot gas escapes into the crank case, causing excessive heating and oil deterioration.

EXHAUST

Good rings are necessary to thoroughly scavenge the cylinder on the exhaust stroke so that the combustion chamber can be completely filled with a new, clean charge on the intake stroke.

COMPRESSION

Leaky piston rings allow part of the gas to escape, thus reducing compression. The result is a weak explosion and the gas that escapes by the rings condenses in the crank case and seriously diminishes the lubricating quality of the oil.

INTAKE

Poor rings allow air and oil to be sucked up into the combustion chamber, causing smoky exhausts and carbon — fouled spark plugs, valve trouble and oil wastage.

Why better piston rings mean power and economy



This inside view of a motor will show you how important piston rings are in the production of power. It will show you how and why piston rings save fuel and oil. How they really determine the power and economy of your motor.

Piston ring leakage may seem trifling in a single motor revolution, but when the leakage is multiplied by 1,200 to 3,000 revolutions per minute, it is something to reckon with. It needs correction as much as would a leak in the gasoline tank. That's why it pays to put in the best piston rings obtainable.

A full set of

McQUAY-NORRIS LEAK-PROOF PISTON RINGS

If Your
Engine is
an Oil
Pumper



McQUAY-NORRIS
Superoyl
RINGS

A specially designed ring with an oil reservoir that collects all of excess oil from the cylinder wall, leaving just the film necessary for proper lubrication. Used in top groove of each piston with McQuay-Norris LEAK-PROOF equipment in lower grooves to insure maximum compression, power and economy.

pays in power—in economy—in a clean, dependable motor. For over seven years, McQuay-Norris LEAK-PROOF Piston Rings have been improving motors—making them run better and stopping the waste of gasoline and oil in them. They are not an experiment—not a theory. They are time-tried and proven. They are giving satisfaction in hundreds of thousands of motors in every field—in automobiles and trucks—tractors and stationary engines—marine motors, motorcycles and aeroplanes—wherever engines are used.

And McQuay-Norris Service equals McQuay-Norris LEAK-PROOF Piston Ring performance. You can get any and every size and over-size for every engine promptly from your dealer, repairman and garageman. More than 300 jobbing houses scattered over the country carry complete service stocks of sizes which are at your dealer's disposal. Order and be sure you get the Genuine McQuay-Norris LEAK-PROOF—the ring which has seven years of successful performance to endorse it.

McQuay-Norris Mfg. Co., St. Louis, U.S.A.

Branch Offices
New York Chicago Pittsburgh San Francisco Los Angeles
Seattle Kansas City St. Paul Atlanta Dallas
Canadian Factory: W. H. Banfield & Sons, Ltd., 372 Pape Ave., Toronto

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS



Get this
Free Book

Giving complete information about the importance of piston rings. It will enable you to judge for yourself the claims of all rings. For your own satisfaction, profit and protection, write your name on the margin and send for your copy today. Address Dept. T. S

Hitch Your Wagon to the AUTOHORSE



The AUTOHORSE with Auxiliary Wheels Ready to Attach to Any Wagon



How the AUTOHORSE Motorizes a Moving Van. Draw Up Auxiliary Wheels and Go

Unlimited Uses with the AUTOHORSE

The AUTOHORSE can easily be attached to any size or style vehicle capable of carrying a load up to five tons. This means that you do not have to purchase entirely new equipment or limit yourself to one type of body for your various kinds of trucking as the AUTOHORSE can be backed up to any kind of a wagon or dray and hooked up in less time than it would take to change the teams. The AUTOHORSE will put big profit in your hauling.

Ask us about the AUTOHORSE

Manufactured by

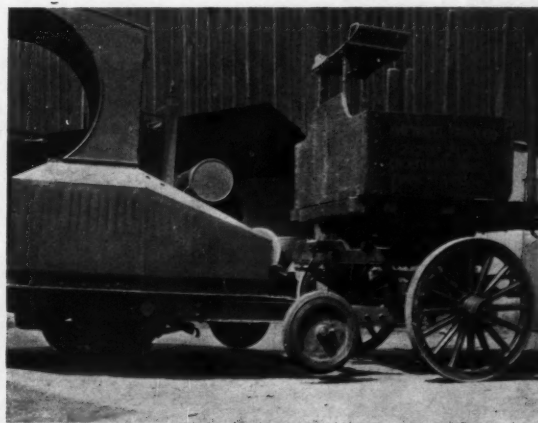
ONE WHEEL TRUCK COMPANY

2122-30 Chouteau Avenue

ST. LOUIS, MO.



Easily Attached and Detached from One Vehicle to Another



Auxiliary Wheels Raised and Ready to Go

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS



Overcoming a Freight Embargo

The freight embargo on New England threatened to paralyze the S-K-F Ball Bearing Company of Hartford, Connecticut. Forty-four tons of urgently needed raw material lay on the New York docks, 140 miles away.

The railroads couldn't haul it. The factory couldn't run without it. In this crisis the S-K-F managers called on the Heavy Haulage Company of New York.

The Haulage Company responded by putting five 5½ ton MACK trucks with trailers on the job. When the next day broke the forty-four tons were at the S-K-F plant. The MACK trucks had made the 140 mile haul overnight.

MACK trucks have performed many unusual feats like this. They are ready for any task any time of day or night. They are doing the hardest kind of hauling every day, and are doing it at minimum cost for fuel and upkeep.

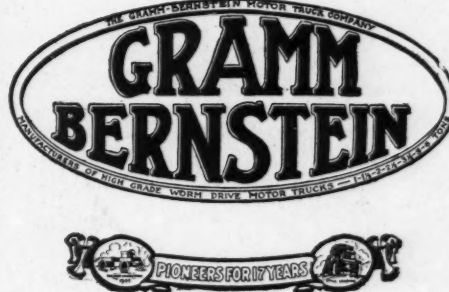
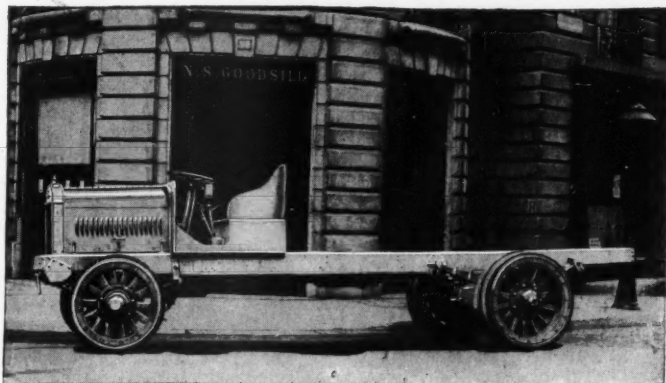
MACK trucks have speed, strength, power. Many transfer and storage companies will use no other make.

Write for facts and figures.

MACK truck capacities: 1, 1½, 2, 3½, 5½, and 7½ tons; with trailers, to 15 tons.

INTERNATIONAL MOTOR COMPANY
NEW YORK

Performance Counts



Twenty-Four Hours a Day Without a Stop

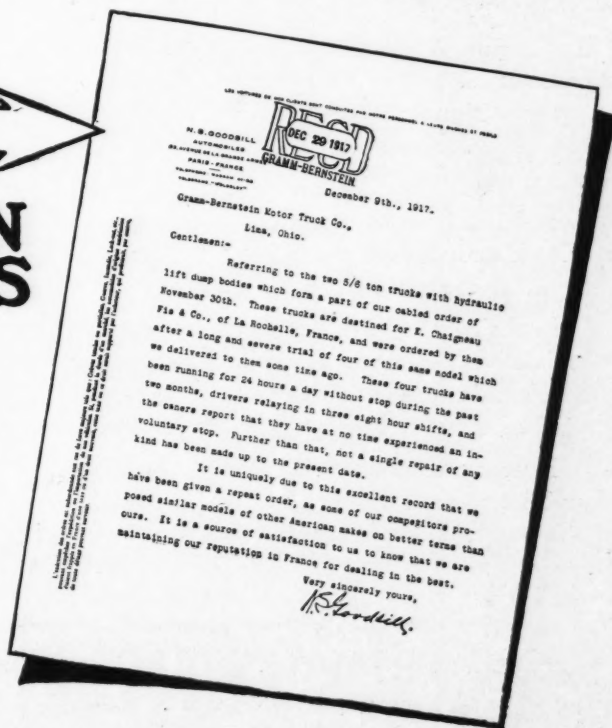
With three shifts of drivers, the Gramm-Bernstein trucks of E. Chaigneau Fis & Co. of Rochelle, France, worked continuously for months without a moment's delay from trouble. On this remarkable showing, they increased their fleet of G-B trucks.

NOTE THEIR SATISFACTION

GRAMM-BERNSTEIN MOTOR TRUCKS

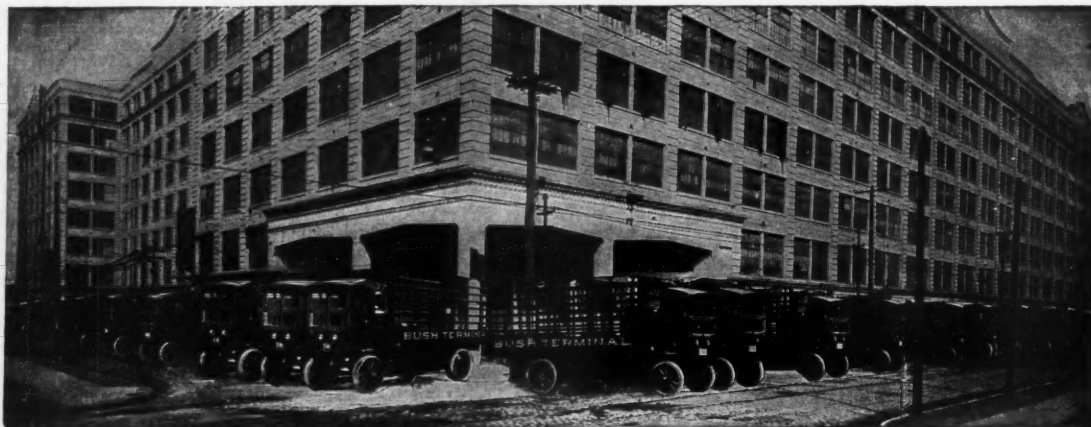
are making this kind of records everywhere—building a uniform reputation for economical, dependable service—the world over. You should have the facts of their work in your line. Send for it today.

*Used Exclusively by
Many Foreign Governments*



THE GRAMM-BERNSTEIN MOTOR TRUCK COMPANY, LIMA, OHIO

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS



Some of the fleet of over fifty electric trucks employed to make city deliveries and collect freight for this terminal company

Know your costs—then you will use electrics for your hauling and delivery

Today rising costs are in everyone's mind. Enterprising men are finding out why their controllable costs are high—and are remedying conditions wherever possible.

Rising costs in transportation are no exception, and they form a big item that may be reduced. Many a far-seeing man is lowering his costs, and making sure of the future by using storage battery vehicles.

In their field—city and suburban haulage and delivery—electrics are cheaper, more reliable and more satisfactory than any other kind of street vehicle.

Horses are slow and inefficient; their feed and keep costs are prohibitive. "Gas" is

high, with supply behind the demand, and with Uncle Sam's needs coming first.

The war has brought about a long delayed recognition of the superiority, in cost, convenience and reliability, of the storage battery vehicle.

No small part of this success is due to the Edison Storage Batteries.

These famous Nickel-Iron-Alkaline Batteries, with their Steel-and-Iron construction, have the strength and durability to meet every requirement of this service. Many Edison Batteries, after six and seven years of service and fifty thousand and more miles of travel, are still giving full rated capacity.

You can apply electrics to your problem. Let us tell you how. Bulletin No. 500-B on request.



EDISON STORAGE BATTERY COMPANY

Factory and Main Office - - - - ORANGE, N. J.

Distributors in

New York Boston Chicago Detroit San Francisco Philadelphia
Seattle Los Angeles New Orleans Pittsburgh Washington Kansas City





GMC Insures Reliability

Doing the job when it is wanted is a vital factor in all hauling work and the guarantee that such promptness can be observed is a factor for careful consideration.

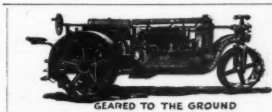
Many storage and transfer companies, concerns whose hauling is the biggest stock in trade, have settled upon GMC trucks as their equipment. And this is not to be wondered at when it is considered that

GMC reliability is now firmly established wherever these trucks have worked.

Not only does their splendid construction and design minimize the possibility of failure, but the fact that in the vast majority of cases the truck has been fitted to the job is a further insurance against faulty service.

In a word, a GMC can be put to a particular work, equipped with special body and of the proper size to do that labor perfectly.

And truck Headquarters stands ready to advise and help in making this selection.



The GMC
Samson Farm Tractor —
also made by the General
Motors Truck Company

Let your next truck be a GMC

GENERAL MOTORS TRUCK COMPANY

One of the Units of the General Motors Corporation

New York

Boston

San Francisco

PONTIAC, MICHIGAN

Distributors Most Everywhere

Philadelphia

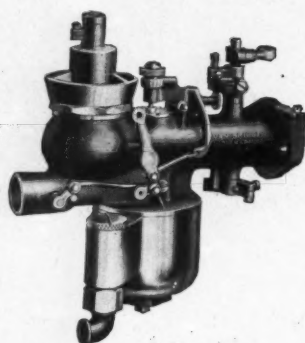
St. Louis

Chicago

(378)

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

An Indiana Transfer Company Increased Their Truck Mileage 41% by Installing a



VAN BRIGGLE CARBURETOR

and secured additional power.

When gasoline costs what it does today, you must get your money's worth out of it.

The Van Briggie Carburetor is easily adjusted, responds to varying loads, picks up instantly without choking, is practically "fool-proof," and has made many an old motor act like a new one.

Put one on one of your trucks and keep a record of your gasoline and watch it pay for itself.

We guarantee satisfaction on the basis of 30 days' trial and your money back in exchange for the carburetor if you are not satisfied. You can't lose on such a proposition and you can't afford to pass it by.

Write us today, giving us the make and size of your trucks

Van Briggie Motor Device Co., 427 No. Capitol Ave., Indianapolis, Ind.

A REAL VACUUM CLEANER CONNERSVILLE

CENTRIFUGAL SEPARATING TYPE

DESIGNED FOR THE PARTICULAR NEED OF THE CARPET-CLEANER

Not a makeshift

Not a toy

Not a power-eater

Not bulky

Guaranteed

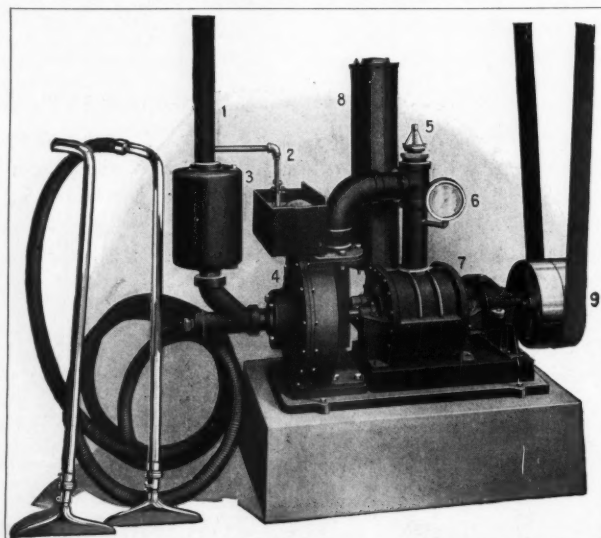
to give

Satisfaction

Immediate

Deliveries

Sizes to suit



Built for YOU

Durable and Simple

Small Current

Consumption

Requires little space

Handles dry dust

and soap suds,

No changing

NO TANKS

to clean out

More in use than

all other types
combined

Manufactured by

United Vacuum Appliance Co., Connerville, Indiana

Distributed by

ELECTRICAL & SPECIALTY SUPPLY CO.
MADISON TERMINAL BUILDING CHICAGO, ILL.

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS



Double Space At Half Cost

MILLIONS of cubic feet of storage space are a dead loss because they are never used—because they cannot be reached by the means at hand.

But all space comes into easy reach when you install the

ECONOMY Tiering Machine

It not only enables you to use every inch of space as high up as fire restrictions permit, but it reduces the cost of handling your barrels, boxes, bales or crates. **One man does the work of three to seven**—and does it quicker, better, safer.

Nine Overwhelming Features

Our folder "9 Overwhelming Reasons Why" tells all about the Economy Tiering Machine and how it saves labor, space and time.

Write Today

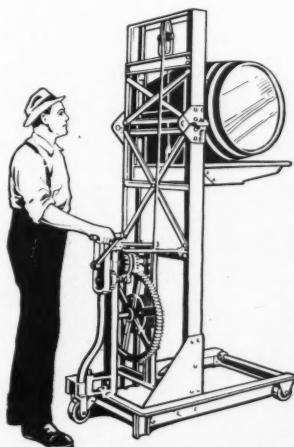
for a copy of this descriptive folder

ECONOMY ENGINEERING COMPANY

Also makers of Economy Steel Barrel Racks

408 South Washtenaw Ave., Chicago
85 Murray St., New York

Foreign Agents—Brown Portable Elevator Co., Chicago



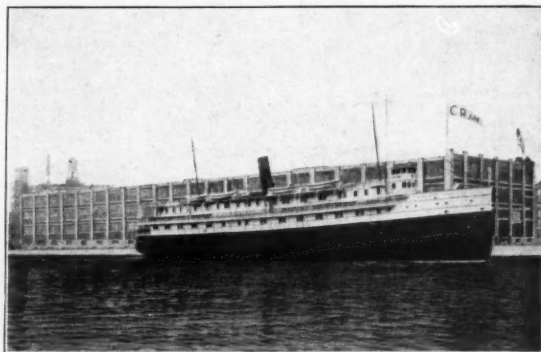
Labor Is Scarce

Handle more goods, and
do it faster by installing
modern appliances

We Equipped These Two Plants and Many Others



Equipped with one 10,000 lbs. capacity Mechanical Operated Heavy Duty Warehouse Elevator and one 1,800 lbs. capacity Electric Push Button Passenger Elevator



C. R. & M. Boat Line Warehouse just equipped with two 6,000 lbs. and one 8,000 lbs. capacity Mechanical Operated Heavy Duty Warehouse Elevators and one 8,000 lbs. capacity Hydraulic Plunger Type Heavy Duty Warehouse Elevator

Heavy Duty Warehouse Elevators

As fool-proof as it is possible
to make them. We specialize
in warehouse needs and ask
an opportunity to study your
requirements. *Write us today.*

COLLEY ELEVATOR CO., Agents
522 West Monroe Street Chicago, Ill.

Put Trucking "pep" in your business

MODEL — G
Capacity 3,000 lbs.
\$2,000 f.o.b. Factory

MODEL — B
Capacity 5,000 lbs.
\$2,700 f.o.b. Factory

MODEL — C
Capacity 7,000 lbs.
\$3,500 f.o.b. Factory

MODERN commercialism demands modern facilities. There's no exception, and of all modern facilities an up-to-the-minute LANE truck of the right size and type will put more snap and life into a business wrestling with haulage or delivery problems than any other one thing in existence.

Three sizes of Lane trucks and many body styles cover the trucking requirements of every business—from smallest to largest. And each Lane truck is a finished truck. It is absolutely complete in every detail, including such essential features as high grade electric lighting and starting systems—auxiliary equipment, not found on a vast majority of trucks.

Lane trucks have Continental heavy duty motors; roller bearing, independent sliding gear transmission; four speeds forward and reverse. Timken worm drive rear axles. Ross steering gears. Positive water circulation. Special type radiators. Drop forged I-beam front axle. Six-inch extra heavy, reinforced channel steel frames. Three-inch channel steel bumpers. Stromberg hot air jacketed intake carburetors. Two-unit system generators and motors. Willard Storage Batteries. Goodrich de Luxe Tires, and many other features, making Lane trucks the acknowledged leaders in their capacity class.

Let the Lane dealer give you complete detailed specifications and a physical demonstration of Lane truck superiority, or write us direct.

THE LANE MOTOR TRUCK CO., Dept. K
Kalamazoo, Michigan

LANE

MOTOR TRUCKS



KISSEL TRUCKS

Backed By Ten Years' Experience

KISSEL has spent ten years to bring his trucks up to that point of mechanical superiority that insures dependable performance, uninterrupted service and economical maintenance.

Kissel builds his own truck power plant. That's why Kissel Trucks give uninterrupted performance. The perfected worm-drive rear axle and superior front axle are traction insurance. The Kissel frame, springs, brakes—every moving or fixed unit—are so designed, constructed and balanced to give 100% efficient service.

As a result, Kissel Trucks fully meet today's closer shipping schedules, wider delivery areas and greater hauling distances.

If you would choose your motor truck equipment by its reputation and known performance, see your nearest Kissel dealer.

KISSEL MOTOR CAR COMPANY
HARTFORD WISCONSIN, U. S. A.

THE CURE

For Engines with These Symptoms

CARBON

Collection of carbon, not allowing valves to seat; also in combustion chamber, causing pre-ignition, loss of power, and a hot engine.

Fouled spark plugs cause skipping. Gasoline leaks in to cylinder cutting lubricating qualities of oil, causes excessive wear.

Oil turns black from being burned, and does not give correct lubricating qualities.

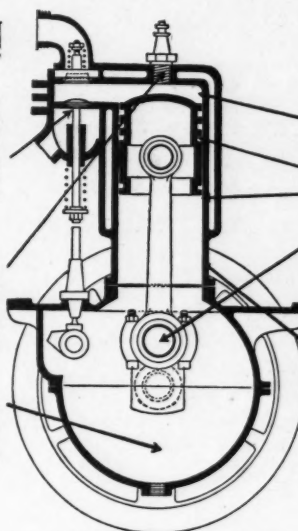
WEAR

Cylinders larger at the top and out of round.

Compression and hot gases escape, burning oil, destroying life of piston rings and engine.

Excessive gasoline and oil consumed. Bearings do not stand up.

Dry and pin-scored cylinders are results.



TREATMENT

Regrinding the Cylinders,
Fitting New Pistons, Rings
and Pins



Your Protection
Standardized Work
and Prices

1131 East Georgia Street

We have 600 different makes and sizes pistons; are the largest exclusive cylinder regrinding and oversize piston and pin shop in the Middle West



(BELT DRESSING)

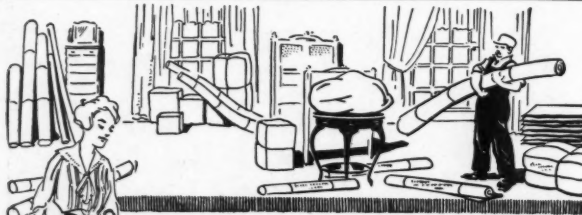
G. B. Stock XYLITE Grease and Oil Co.

**Manufacturers of Heat-Resisting
Transmission Greases**

Graphite Greases and Oils

We manufacture lubricants to overcome difficulties. Tell us your troubles. We can overcome the friction.

Factory and Office: PORT HURON, MICH.



Better Protection of goods in shipment and storage

The problem of protecting rugs, carpets, draperies, etc., against moths, mice, germs, while in storage or in transit, is solved by the use of

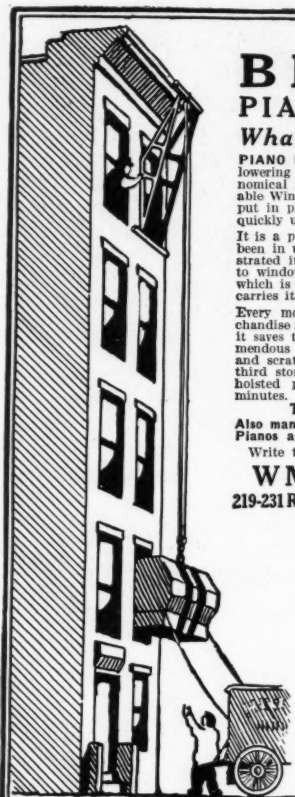
WHITE TAR PAPER

Made in two grades—Pine Tar and Cedar. Pine Tar for ordinary materials; Cedar for the finest fabrics. Put up in rolls of 12 sheets, each sheet 40 x 48, in full size and in continuous rolls 50 yds. to 1,000 yds. Also heavy tar bag paper cut 5 x 7 and packed 100 sheets to the carton.

We sell Naphtaline Moth Balls, Flakes Crystals, Powder and Blocks; Lavender Compound and Cedar Compound in one-pound and two-pound packages, 100-pound boxes and barrels.

Write today for price list and full information.

The WHITE TAR COMPANY
CLIFF & JOHN STREETS, NEW YORK, N. Y.



BREEN'S PIANO DERRICK

What Everybody Needs

PIANO MOVERS find that the hoisting and lowering of pianos is made easy, safe and economical by the use of this practical, adjustable Window Derrick. Handy to carry, easily put in place by one man, always ready and quickly utilized.

It is a practical, patented invention which has been in use for twelve years and has demonstrated its value beyond question. It clamps to window. There is also a swing under bar which is placed under outer end of piano and carries it in or out.

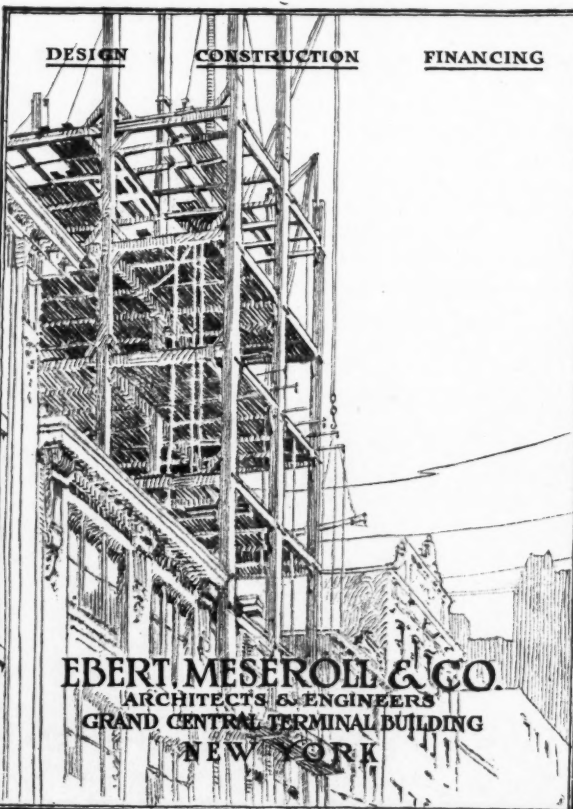
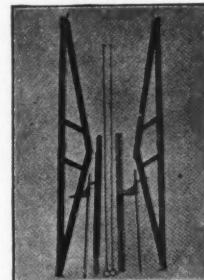
Every mover of safes, pianos or heavy merchandise needs Breen's Piano Derrick because it saves the strength of the men, means a tremendous saving of time, and obviates jams and scratches. Several firms have taken out third story window, set the derrick in place, hoisted piano, and replaced window in 25 minutes.

The Derrick Complete \$35.00

Also manufacturers of Belts and Bars to hoist Pianos and Ropes, Blocks and Piano Covers

Write to-day. Catalogue for the asking.

WM. H. BREEN
219-231 Rutherford Ave., Charlestown, Mass.



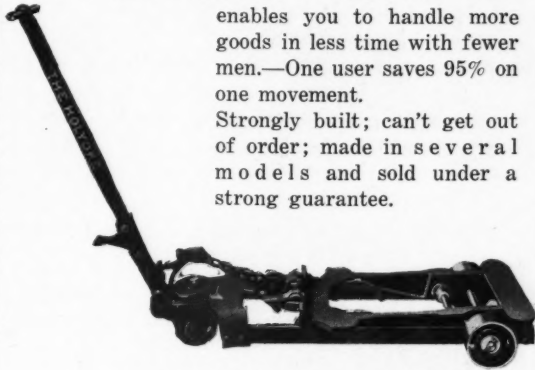
EBERT MESEROLL & CO.
ARCHITECTS & ENGINEERS
GRAND CENTRAL TERMINAL BUILDING
NEW YORK

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

Replacing Men Who Have Gone "Over There"

Storage is an essential industry, but men are hard to get, and pay is high

"The HOLYOKE" Transfer Truck



enables you to handle more goods in less time with fewer men.—One user saves 95% on one movement.

Strongly built; can't get out of order; made in several models and sold under a strong guarantee.

Write for Circular B-1

Holyoke Truck Company

Main Office and Factory

105 Race Street HOLYOKE, MASS.

Distributors for Metropolitan District:
Young, Corley & Dolan, Inc., 115 Broadway, N.Y. C.
Boston Office: Room 501, 161 Devonshire St.



DOES THE WORK OF SEVERAL MEN

One man with a *Revolvator* will often do the work of two or three men in piling barrels, cases, bales, etc. The *Revolvator* saves time, labor and storage space.

Put your piling problem up to us. Write for Bulletin T-42

REVOLVATOR CO.

389 Garfield Avenue Sales Agent for Jersey City, N. J.
N. Y. Revolving Portable Elevator Company

6,144 More Tons From Every 2½ Ton Truck

The freight car and locomotive shortage is so great that Truck owners must make wider and better use of their transportation facilities. Every 2½-ton motor truck, with an average of four trips a day for 300 working days a year, if operated with a King Semi-Trailer at only 80% efficiency and carrying a load in only one direction, would show a gain of 6,144 tons per year.



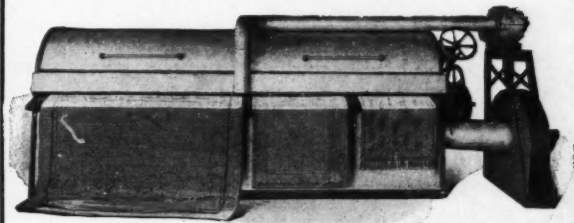
King Semi-Trailers are built for every hauling purpose. If you have a hauling problem or want increased truck efficiency, send for our latest industry bulletins on King Trailers. We are glad to help you engineer your hauling problem if you will give us information on the material to be hauled, the average length of haul and your percentage of grades.

KING TRAILER COMPANY

956 Main Street, Ann Arbor, Michigan

Because there is Big Money in It

storage and warehouse companies are installing this big rug cleaning machine



The most perfect Rug Cleaner made

The Cleveland Laundry Machinery Mfg. Co.

CLEVELAND, O.



Save
Time
and
Labor
Sawing
Boxing
and
Crating
Lumber

This neat, compact saw can be hung up against any convenient wall or column, thus taking up no valuable floor space.

The Reliance MOTOR DRIVEN Swing Saw

will save the time and energy of hand cutting—do the work much better and faster—and, being self contained, can be placed anywhere, regardless of power supply.

Easily installed by anybody. Direct or alternating motor. Built in three sizes, to accommodate any class of work.

Tell us your requirements, and we will submit proposals.

Reno-Kaetker Electric Co.
Gerke Building, Cincinnati, Ohio

Crushed Oats!



Patented

Your Stock
Gets *More*
Nutriment
from *Less*
Oats

Two of the many reasons why you should have an Oat Crusher in your stable are:

- 1st. Your stock is built up in bone and muscle. No colic, or stomach trouble.
- 2nd. You feed 15% to 20% less in weight, which saves you money and helps your "Uncle Sam" win the war.

Thousands of users will recommend
Crushed Oats

Write us for further information.

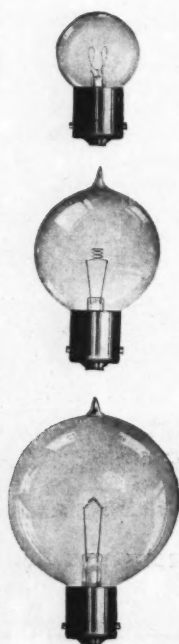
GIBSON OAT CRUSHER CO.

McCormick Bldg.

Chicago, Ill.

Eastern Office: 15 East 30th Street, New York City

Federal Mazda Automobile Bulbs



BULBS that can be relied on to stand hard riding and stay bright relieve the driver of either passenger or commercial automobile of the many chances for accidents and arrest that spring up when lamps fail to light.

Good lamp bulbs are just as necessary to the properly equipped car or truck as good tires and good spark plugs.

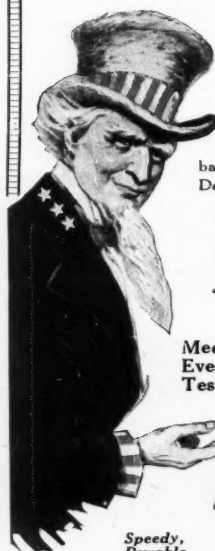
That's why you will want Federal MAZDAS—because they are the best that money can buy.

Get in touch with our local distributor or direct with

**FEDERAL MINIATURE
LAMP DIVISION**

NATIONAL LAMP WORKS
of GENERAL ELECTRIC CO.

920 S. Michigan Ave. Chicago, Ill.



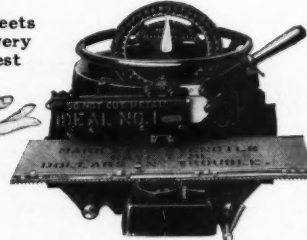
Used by
the Navy

To speed up the handling of supplies and ammunition to our boys abroad, the U. S. Government is equipping its battleships, cantonnments, Quartermaster's Depts., etc., with

**The IDEAL
STENCIL MACHINE**

"The Machine That Safeguards Your Shipments"

Meets
Every
Test



Speedy,
Durable,
Accurate

Put Your Shipping-Room on an Efficient Basis

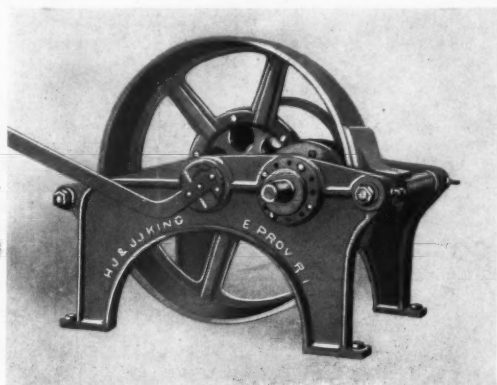
Do away with tags, labels and hand-lettering—mark your shipments boldly and legibly, as the Government does, with stencils cut on the IDEAL Stencil Machine. Write for free booklet and sample stencils.

IDEAL STENCIL MACHINE CO.

31 Ideal Block

BELLEVILLE, ILL.

Sales offices in principal cities



WHIP HOISTS

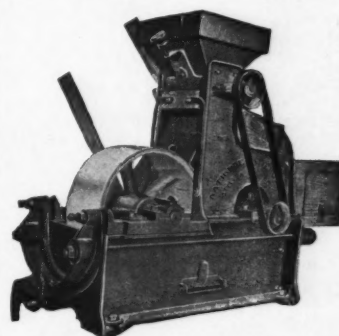
Standard or Special that
will meet your requirements

WE CARRY IN STOCK
FRICTION ROLLS AND SHEAVES
and can furnish repair parts
on short notice.

H. J. & J. J. KING

23 JAMES STREET

E. PROVIDENCE, R. I.



"Digestion First"

Send for "Digestion First" booklet.
A work of art pointing out the road
to wealth. Presenting complete
records of savings by others and a
list of users you know.

EXCEL MANUFACTURING CO.
POTTERSVILLE, NEW JERSEY

Makers of the National Oat Crusher

Made with motor attached or with pulley for belt driving



On Hand for Prompt Shipment

38-foot Scenery Truck, new. Flat
platform, slatted for convenience
in hauling trunks or small items.

AUBURN WAGON COMPANY

Martinsburg

West Virginia

You Get the Best Service



from your horses by the use of
Capewell nails in shoeing. These
nails *hold* the shoes tight and
they *hold* them long.

Safety and satisfac- The world's best nail
tion for the man who at a fair price—not
insists upon the use the cheapest regard-
of Capewell nails. less of quality.

The Capewell Horse Nail Co.

HARTFORD, CONN.

Leading Horse Nail Makers of the World



**MOTOR
TRUCKS**

ALL WORM DRIVE

1 TON · 2 TON · 3½ TON

DART Trucks are unusually
satisfactory for Transfermen

Ask us for our nearest dealer

DART MOTOR TRUCK COMPANY
Dept. T WATERLOO, IA.

A TRIUMPH is your BUCKEYE SILL PIANO TRUCK

says an owner of four of them
SELF-LIFTING PIANO TRUCK CO., Findlay, O.



End
Truck
Covers

Straps

Have You Met This Kaiserite?

NAIL LIES LIKE THESE!

THAT Red Cross supplies are being sold to shopkeepers by dishonest Red Cross officials.

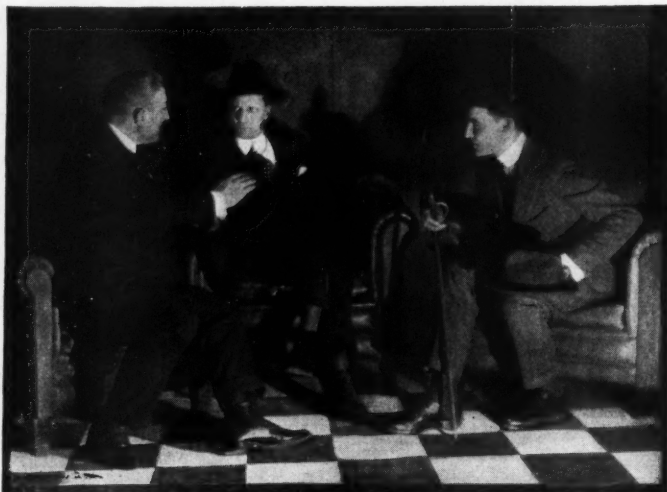
THAT the Masonic orders have protested against allowing the Knights of Columbus to build recreation huts for soldiers.

THAT interned German prisoners are being fed five meals a day.

THAT this is "a rich man's war" or "a business man's war."

THAT farmers are profiteering.

THAT nine American warships were sunk in a disastrous engagement in the North Sea.



YOU FIND HIM in hotel lobbies, smoking compartments, clubs, offices, and even in homes. He thinks it's clever to repeat "inside facts" about the war. He is a scandal-monger of the most dangerous type.

He repeats all the rumors, criticisms and lies he hears about our country's part in the war. He gives you names, places, dates. He is very plausible.

But if you pin him down, if you ask him what he really **KNOWS** at first-hand, he becomes vague, non-committal, slippery. He tries to make you think that the Government can fool you, if you are willing to let it—but it can't fool him. No, siree! He's too smart.

People like that are hurting your country every day. They are playing the Kaiser's game. They are fighting against this country. They are making it harder to win the war.

Through their vanity or curiosity or **TREASON** they are

helping German propagandists to sow the seeds of discontent.

For every lie that has been traced originated with a German spy. Don't forget that.

There was the one about the President's Secretary. It was said, and said again, and spread broadcast, that Mr. Tumulty was convicted of treason and shot at Fort Leavenworth. That lie was easily scotched by a public statement from Mr. Tumulty himself.

But other lies are more insidious—harder to down. In another paragraph some of them are told. But they are only a few of many.

They are taken from a publication, issued by the Committee on Public Information, called:

"THE KAISERITE IN AMERICA" 101 GERMAN LIES

This little book describes the methods of Germans here and quotes 101 lies that have been nailed by a newspaper which



took the trouble to run them down. It will be sent to you upon request.

Get the Facts from Washington!

Get in the fight to stamp out this malicious slander. As you travel about the country or even in your social life at home, run down these lies. Call the bluff of any one who says he has "inside information." Tell him that it's his patriotic duty to help you find the source of what he's saying.

If you find a disloyal person in your search, give his name to the Department of Justice in Washington and tell them where to find him. It is your plain and solemn duty to fight the enemy at home by stamping out these lies. Where shall we send your copy of this book? It's free!

COMMITTEE ON PUBLIC INFORMATION

8 JACKSON PLACE,
WASHINGTON, D. C.

CONTRIBUTED THROUGH DIVISION OF ADVERTISING

U. S. GOV'T COMM. ON PUBLIC INFORMATION

THIS SPACE CONTRIBUTED FOR THE WINNING OF THE WAR BY

THE PUBLISHERS OF THIS MAGAZINE

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS



If you don't find what you want here, your advertisement here will find it for you.

This Exchange section serves a real purpose in the industry by affording a central market place for the disposing of equipment no longer needed, and the securing of special apparatus at bargain prices. If you have any equipment for sale or wish to sell your business, this section is the logical place to advertise. All advertisements in this section will be accepted at a flat rate of three cents per word for each insertion.

POSITION WANTED—Estimator or foreman, ten years' experience, thoroughly understands household warehouse work in all its branches. Box 154, Transfer & Storage, 239 West 39th Street, New York City.

WANTED—An established, paying Transfer and Storage business in or around New York City. Give full particulars. Address Box 153, Transfer & Storage, 239 West 39th Street, New York City.

FOR SALE OR RENT—Four-story warehouse with garage; 30,000 square feet of floor space; going concern; established 25 years. Storage, moving, trucking, carpet cleaning. Located in West Philadelphia. \$5,000 cash, balance easy terms. Particulars given by Chas. S. Thompson, Attorney, 505 Chestnut Street, Philadelphia.

MANAGER WANTS POSITION—Six years manager of large merchandise company; a capable executive and accountant. Will accept assistant's position. Age thirty-two; married. State salary and general duties. Credentials furnished. Address "C," care Transfer & Storage, 239 West 39th Street, New York City.

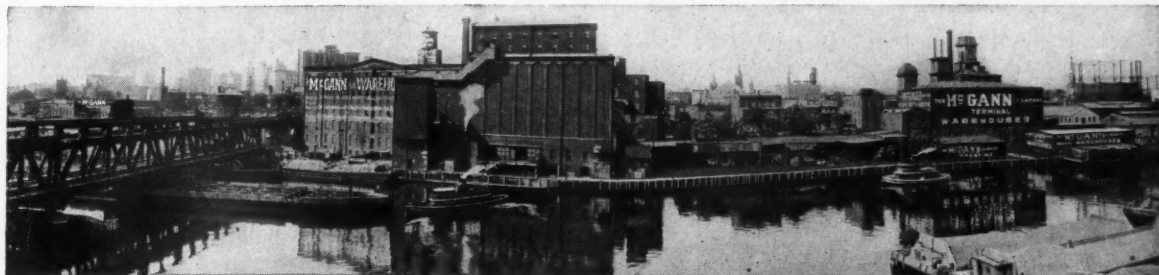
Monroe Flegenheimer Warehouse Insurance Specialist

1451 Broadway, New York

Telephones, Bryant 6736-6976-3230

Can positively **reduce your fire insurance rate**. Remember a low rate is your best advertisement. Reference (by permission): Pioneer Fireproof Storage Warehouses, Lee Bros. Storage & Van Co.

THE LARGEST WAREHOUSING AND TRUCKING ORGANIZATION IN THE STATE
THE McGANN COMPANY GENERAL OFFICE, 100 FRONT ST. NEWARK, N. J.



LIGHTERAGE, RIGGING, WEIGHING
PRIVATE R. R. SIDING

TWENTY BUILDINGS—GENERAL RIVER VIEW SHOWING BUILDINGS NOS. 1, 3, 4, 5
Official Transfer Agents—Warehousemen for Erie, Lackawanna, Lehigh Valley, Pennsylvania and Greenwood Lake Railroads

DISTRIBUTION, TRUCKING,
WAREHOUSING, PRIVATE DOCKS

PLEASE MENTION TRANSFER & STORAGE WHEN WRITING TO ADVERTISERS

Listen!

—to the opinion of those who can appreciate, because of experience, the eminently satisfactory operation of

"The Trackless Train"

"Impossible to do without it."—Erie R. R. Co., Binghamton, N. Y.

"Has come up to our full expectations."—United States Radiator Corp., Detroit, Mich.

"Living up to all expectations."—Continental Motors Corp., Detroit, Mich.

"Just the machine we need."—Anderson Lumber Corp., Marion, S. C.



The haulage problem in your plant may be more complicated or it may be simpler than these firms encountered, but the probabilities are that

Mercury Tractors

Will not only speed up your operations but effect a marked saving in men and money as well.

A card will bring detailed information and a booklet, "The Best Evidence," both interesting and instructive.

Mercury Manufacturing Company

4120 South Halsted Street

Chicago, U. S. A.

INDEX TO ADVERTISERS

The Advertisers' Index is published as a convenience, and not as a part of the advertising contract. Every care will be taken to index correctly. No allowance will be made for errors or failure to insert.

Ahlberg Bearing Co.....	72
Atlas Storage Warehouse (Philadelphia).....	48
Auburn Wagon Co.....	67
Autocar Company	2
Bahr, H. D., Trucking Co.....	45
Bekins Household Shipping Co.....	41
Bill Brothers Co.....	40
Breen, Wm. H.....	64
Brown Trucking Co.	41
Binyon-O'Keefe Fireproof Storage Co.....	50
Blanchard Storage Co., Inc.....	46
Buckeye Transfer & Storage Co.....	47
Buckley Co., T. G.....	42
Buffalo Storage & Carting Co.....	45
Butler Mfg. Co.	63
Cameron Transfer & Storage Co.....	42
Capewell Horse Nail Co.....	67
Carnahan Transfer & Storage Co.....	48
Cathcart Transfer & Storage Co.....	41
Central Co. (Chicago)	41
Central Storage Warehouse (Springfield, Mass.)..	42
Central Storage Warehouse Co. (Cleveland).....	47
Chase Transfer Co.....	42
Cleveland Laundry Machine Co.....	65
Cold Spring Storage Co.....	44
Colley Elevator Co.....	62
Columbia Transfer Co.....	43
Cotter Transfer & Storage Co.....	48
Cummins Storage Co.....	47
Dart Motor Truck Co.....	67
Depenthal Truck & Storage Co.....	48
Ebert Meseroll Co.....	64
Eclipse Mfg. Co.....	Inside Back Cover
Economy Engineering Co.....	61
Edison Storage Battery Co.....	58
Electric & Spec. Sup. Co.....	60
Erie Storage & Carting Co.....	48
Excel Manufacturing Co.....	67
Exchange, The	69
Federal Miniature Lamp Div.....	66
Federal Motor Truck Co.....	Inside Front Cover
Fisk Rubber Co.....	51
Flagg Storage Warehouse Co.....	46
Flegenheimer, Monroe	69
Ft. Dearborn Fireproof Storage Co.....	41
Gardner, B. B., Storage Co., Inc.....	40
General Motors Truck Co.....	59
Gibson Oat Crusher Co.....	66
Glenn, O. J., & Son.....	45
Gordon Fireproof Warehouse & Van Co.....	43
Gramm-Bernstein Motor Truck Co.....	57
Harris Transfer & Warehouse Co.....	40
Haugh & Keenan Storage & Transfer Co.....	49
Higgins Spring & Axle Co.....	4
Hoeveler Warehouse Co.....	49
Hogan Transfer & Storage Co.....	42
Holyoke Truck Co.....	65
Hudson Stores, Inc.....	44
Hudson Warehouse and Distributing Co.....	44
Ideal Stencil Machine Co.....	66
International Motor Co.....	56

Jennings Hanna Warehouse Co.....	50
Judson Freight Forwarding Co.....	3
Kinderman, Julius, & Son.....	45
King Trailer Co.....	65
King, H. J. & J. J.....	67
Kissel Motor Car Co.....	63
Lane Motor Truck Co.....	62
Lincoln Fireproof Storage Co. (Cleveland).....	47
Lincoln Storage Co. (Dayton).....	47
Long Acre Express & Storage Warehouse.....	45
Long Island Storage Warehouses.....	44
McGann Co., The.....	69
McQuay-Norris Mfg. Co.....	54
Merchants Transfer & Storage Co.....	42
Mercury Manufacturing Co.....	70
Metropolitan Storage Warehouse Co.....	45
Miller & Lenington.....	50
Miller North Broad Storage Co.....	48
Mollen Transfer & Storage Co.....	44
Monumental Storage & Carpet Cleaning Co.....	42
Morgan & Brother.....	45
Morr, D. A., Transfer & Storage Co.....	43
Morrow Transfer & Storage Co.....	41
Morse, W. K.....	42
Murdoch Storage & Transfer Co.....	49
Neal Fireproof Storage Co.....	47
North Philadelphia Storage Co.....	49
One-Wheel Truck Co.....	55
Otis Elevator Company.....	53
Pacific Storage & Warehouse Co.....	43
Parkersburg Transfer & Storage Co.....	50
Peasley Transfer & Storage Co.....	41
Penn Storage & Van Co.....	49
Pettit's Storage Warehouse Co.....	41
Post, R. F., Estate.....	50
Redhead Storage Co.....	47
Reno-Kaetker Elec. Co.....	66
Revolvator Company.....	65
Rochester Carting Co.....	46
Schantz Co., Joseph A.....	46
Security Storage & Trust Co. (Baltimore).....	42
Security Storage & Warehouse Co. (Albany).....	44
Self-Lifting Piano Truck Co.....	67
Shattuck & Nimmo Warehouse Co.....	40
Southee, John B.....	44
Spencer Turbine Cleaner Co.....	71
Stacey Auction & Storage Co.....	47
Sterling Motor Truck Co.....	52
Stock Xylite Grease & Oil Co., G. B.....	64
Students' Express & Transfer Co.....	40
Terminal Warehouse Co.....	40
Toledo Merchants' Delivery Co.....	48
Trans-Continental Freight Co.....	1
Troth's Model Warehouses.....	44
Twentieth Century Storage Warehouse Co.....	49
Union Fireproof Warehouse Co.....	47
Utica Carting & Storage Co.....	46
Van Briggie Motor Device Co.....	60
Wagner Fireproof Storage & Truck Co.....	48
Weber Express & Storage Co.....	50
Weicker Transfer & Storage Co.....	40
West End Storage Warehouse.....	46
Western Transfer & Storage Co.....	50
Westheimer Warehouse Co.....	50
White Company.....	Outside Back Cover
White Tar Co.....	64
Young, William.....	46

Spencer Turbine Vacuum Cleaner

THE ideal equipment for the commercial cleaning of carpets and rugs in the storage warehouse.

Spencer equipment combines maximum efficiency with simplicity and minimum floor space.

Spencer apparatus is used for permanently installed vacuum cleaning systems in the finest buildings of the country. You can offer your clients the same satisfactory service.

Used by the Pioneer Warehouses of Brooklyn, N. Y., and many others.

The Spencer Turbine Company
Hartford, Conn.



Save! Save! Save!

MONEY STEEL DEMOCRACY

**Use AHLBERG
Remade Bearings**

WE EXCHANGE ANY MAKE

Our government can well utilize the steel you are demanding with the purchase of new bearings.

"Ahlberg Remade Bearings" have stood the test of actual service and proven worthy. These bearings will render equal service for less money.

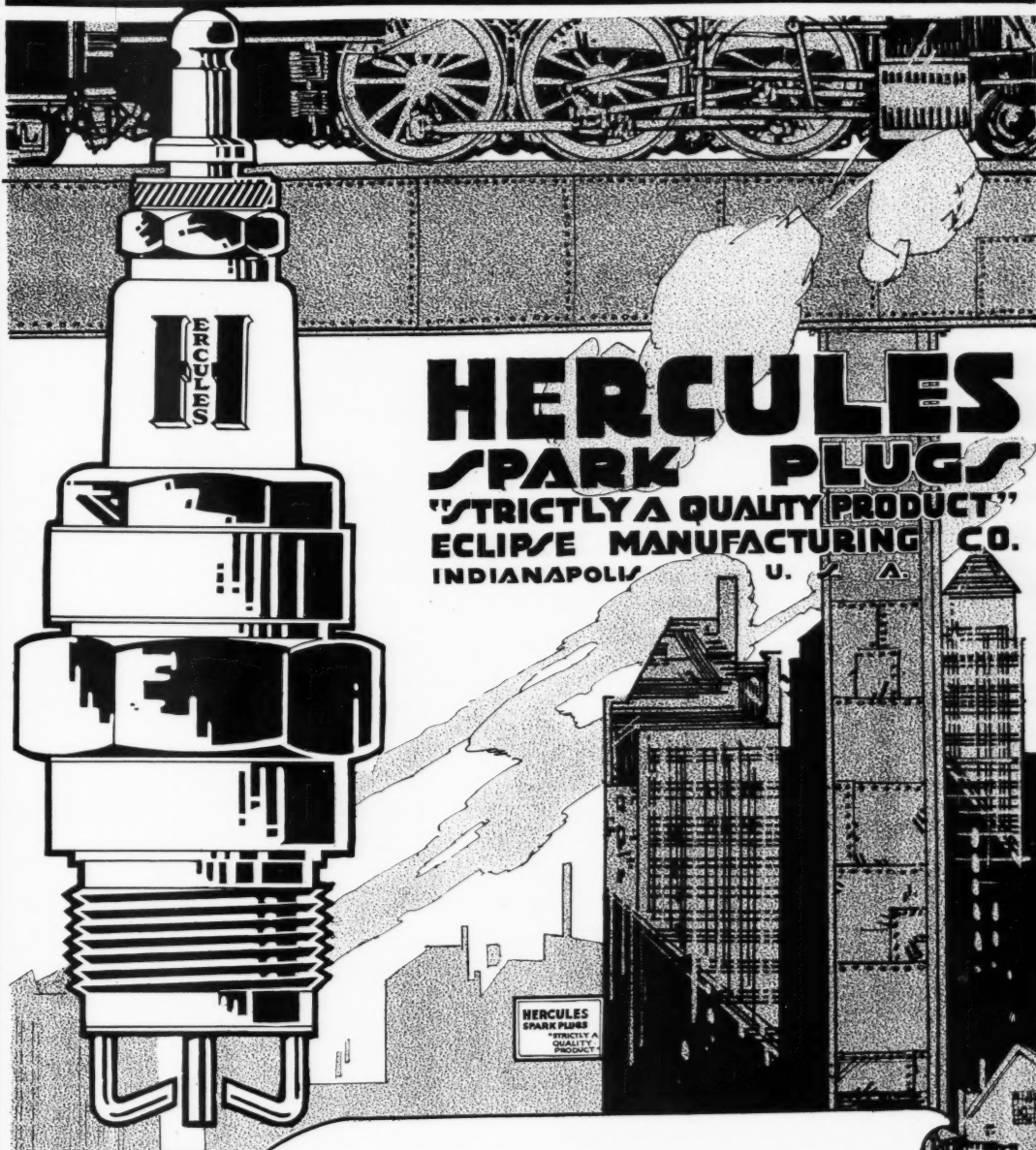
Distributors Hess-Bright New Bearings
Conrad Patent License

AHLBERG BEARING COMPANY
2636 MICHIGAN AVENUE CHICAGO, ILL.

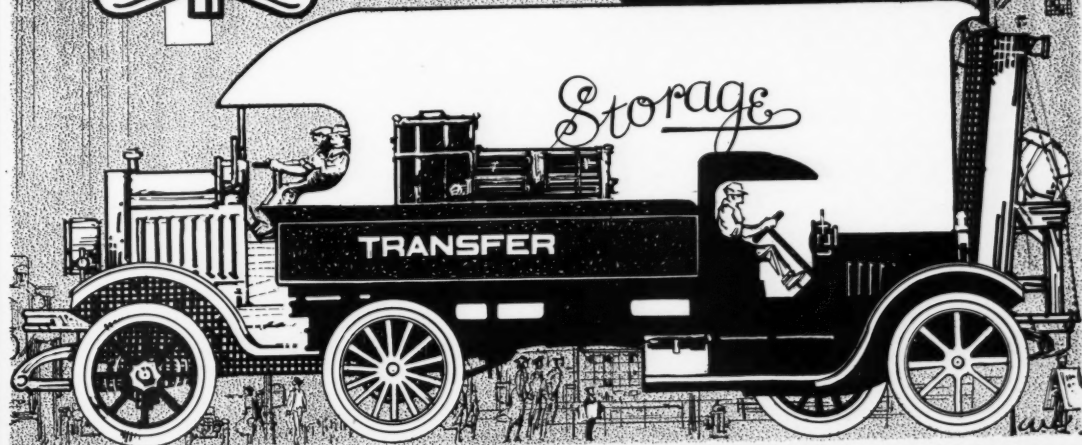
B R A N C H E S A T

St. Louis, Mo.	Portland, Ore.	New York, N. Y.
Minneapolis, Minn.	Los Angeles, Cal.	Boston, Mass.
Cleveland, Ohio	San Francisco, Cal.	Philadelphia, Pa.
Atlanta, Ga.	Detroit, Mich.	

SPECIALS



HERCULES
SPARK PLUGS
"STRICTLY A QUALITY PRODUCT"
ECLIPSE MANUFACTURING CO.
INDIANAPOLIS, U.S.A.



White Trucks



Standardizes on Whites After Experience with Cheaper Trucks

THE Akron Storage and Contracting Company have standardized their trucking equipment on White Trucks as a result of their experience with several cheaper makes. They now have six Whites in service and each unit has consistently demonstrated that the higher purchase price of White Trucks insures more dependable performance and more economical operation.

Many other Moving and Transfer Companies who got along with ordinary trucks in normal times have been forced to replace

these with highest grade trucks to meet the increased demands of war-time business.

Operating needs have intensified their trucking operations to the point where dependable performance can be secured only by using trucks that are able to stand the strain of high pressure operation without impairment to their mechanism.

White Trucks have behind them an unparalleled record for extraordinary endurance. Years of service in every line of motor trucking bear witness to their staying ability under severe and constant duty.

THE WHITE COMPANY
CLEVELAND

